Attachment H-10

Economic References and Analyses

1. Preliminary Estimates of Supportable Retail Lands & Office and Industrial
   [Economics Research Associates, December 2004]

2. Downzoning and Rural Land Markets: A review of two recent studies in Maryland and New Jersey
   [Maryland Center for Agro-Ecology, Inc., July 2006]

3. Cost of Community Services Studies
   [American Farmland Trust, August 2007]

4. Evaluation of Potential for Decrease in Market Value – Parcels Subject to "Down-Zoning"
   [Keyser Marston Associates, October 2010]

5. Fiscal Impact Analysis Findings and Supporting Technical Tables: Residential Development / County General Plan Update Hybrid Scenario
   [Keyser Marston Associates, October 2010]

Attachment H-10.1

Preliminary Estimates of Supportable Retail Lands & Office and Industrial

Prepared by

Economics Research Associates

December 2004

ERA
Economics Research Associates

Memorandum

Date: December 16, 2004

To: LeAnn Carmichael

From: Bill Anderson, Vice-President **ERA Project No.1**5682

RE: Preliminary Estimates of Supportable Retail Lands & Office and Industrial Employment Lands

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Introduction

In December 2002, ERA was asked to provide preliminary estimates of how much neighborhood and community serving retail lands the projected resident population may support, and how much office and industrial employment lands the projected workers may support, within each Community Plan Area of the unincorporated county. The projections were based on the build-out population as reported by County staff (in the case of retail lands), San Diego Association of Governments (SANDAG's) projected employment in the year 2020 (in the case of industrial and office lands), and assumptions explained in this memorandum.

The County has asked ERA to update these estimates based on revised population and land use assumptions for the following two scenarios:

1. The Residential Baseline Proposed General Plan Alternative as of July, 2004
2. The Board of Supervisor's Alternative as of August, 2004

For the retail analysis, SANDAG's projected household income assumptions by community were updated. Land-use allocations were also updated based on the recent alternatives, changes in Specific Plan Area assumptions, and changes in the assumed distribution of land use classifications into retail, office, and industrial land uses, developed with County staff. Other assumptions remain the same as in the December 2002 memorandum unless otherwise stated. This memorandum presents the results of this update.

Many of the General Plan land use classifications allow a combination of retail, office, and/or industrial uses. The assumed distribution of General Plan land use classifications into more specific uses was developed with County staff, and are as follows:

GP Land Use Classification (current and proposed General Plans)	Assumed Retail	Assumed Office	Assumed Industrial
Neighbohood Commercial	100%		
General Commercial	90%	10%	
Service Commercial	20%		80%
Office Professional		100%	
Visitor-Serving Commercial (existing GP)	20%		
Rural Commercial (proposed GP)	60%	10%	
Limited Impact Industrial		10%	90%
General Impact Industrial			100%

Visitor-Serving Commercial is a designation under the existing General Plan, and includes tourism-related uses as well as retail uses. Under the proposed General Plan update, Visitor-Serving designations are folded into a new Rural Commercial designation that includes visitor-serving uses as well as other rural commercial uses.

The revised estimates of supportable land are compared with 1) the amount of land currently developed for these uses as of 2002, 2) the amount of land planned for these uses under the existing General Plan, which has not changed since the 2002 memorandum, and 3) the amount of land planned for these uses under the two proposed General Plan alternatives.

This analysis is input to the General Plan Update process. The purpose is to initially identify potential areas where the amount of land that is planned for commercial and industrial uses within each Community Plan Area may be insufficient and needs to be increased, or the amount of land planned well exceeds projected demand, thereby providing flexibility for considering land use changes.

The projections of potential demand for retail use is restricted to that generated by the local resident population. Some communities have more retail land planned, indeed already developed, than is necessary to service the local Community Plan Area resident population. While some communities may have a surplus of commercial land designated to serve their existing and projected resident population, they may also serve other populations, such as tourists, travelers, or residents of surrounding communities.

The estimated amount industrial and office land supportable by 2020 is based on SANDAG's projected employment by sector for each CPA (as of December 2002), and countywide average standards of employment density. Some communities currently have more industrial and office land already developed or planned than would be expected given

projected employment. This may be the result of industrial and office uses that have lower than average employment density characteristics.

These variances illustrate an important point – that the estimated potential land surpluses or deficits for commercial retail, office, and industrial land uses by CPA should not be interpreted definitively. Rather, the estimates and findings presented here should be used as initial guidelines that warrant further refined investigation on a community plan level as the County's General Plan and respective community plans are updated.

ERA's methodology and preliminary results are discussed below.

Neighborhood and Community-Serving Retail Land

The following is a summary of the methodology used to estimate the amount of acres needed for neighborhood and community-serving retail outlets to service CPA residents. Additional land may be supported to serve tourists or residents from surrounding communities.

Briefly, ERA developed retail expenditure factors per household and applied them to the projected households in each community plan area. This potential buying power was then converted into supportable retail space estimates (in square feet). The resulting square footages were converted into net commercial acreage based on standard floor-area ratios (which the County may want to modify for certain community plan areas if they have non-standard commercial densities). Net acreage was then converted into gross acreage for purposes of comparison with 1) currently developed retail gross acreage, 2) retail gross acreage planned under the current General Plan, and 3) retail gross acreage designated under the proposed General Plan for the baseline scenario and the Board scenario. The factors were originally developed in 2002 based on 2001 numbers and relationships. They are still applicable for generally estimating supportable retail acreage for the updated population forecasts.

The results of the analysis are presented in Tables A1 through A12 for the Baseline Proposed General Plan Alternative and Tables B1 through B12 for the Board Alternative, as explained below. These estimates are preliminary and need to be reviewed by the General Plan Team to assess their reasonableness given the actual characteristics and opportunities of each community.

Table A-1 presents total estimated sales in retail outlets to San Diego residents. This table begins with the total taxable sales in retail outlets in San Diego County, as provided by the California State Board of Equalization (data is from 2000, the most recent complete year available at the time of the original analysis, adjusted for inflation to 2001 dollars). A substantial proportion of sales at drug stores, food stores selling all types of liquor, and all other food stores are non-taxable, thus sales in these categories have been increased by factors to account for all sales. Sales of autos, planes and boats were omitted from this analysis. The result is an Estimated Aggregate Retail Expenditures in the selected retail categories of approximately $27.1 billion (presented in inflation adjusted 2001 dollars).

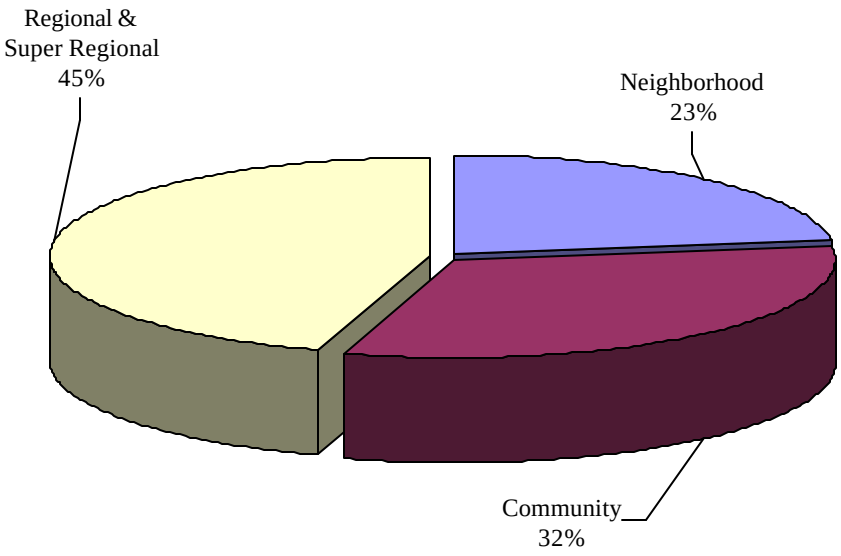
This estimate of retail expenditures includes tourism expenditures and purchases made by Mexicans who live in Baja who shop in San Diego County, which, if included in this analysis, would distort the eventual sales per household factors. ERA used the results of the 2000 San Diego County Visitor Profile, published by the San Diego Convention and Visitors Bureau, to estimate the magnitude of visitor expenditures in the relevant categories ($355 million). ERA updated factors from a San Diego Dialogue study and other local data to estimate retail sales to non-resident Mexican Nationals ($1.5 billion). These expenditures were subtracted from total estimated retail expenditures, providing an estimate of resident expenditures ($26.7 billion). Next, resident expenditures were divided by the number of San Diego County households in 2000 (994,677)[1], rendering Estimated Resident Expenditures per Household of $26,873.

ERA then estimated the distribution of expenditures occurring ***within*** neighborhood, community, and regional/super-regional centers, and those occurring ***outside*** of centers, such as in stand alone outlets, strip retail locations, or retail districts (Table A-2).

To determine the magnitude and distribution of expenditures occurring ***within*** centers, ERA determined the total square feet of retail space in neighborhood, community, and regional/super-regional centers in San Diego County[2], and multiplied each square footage by industry standard average sales per square foot factors, as reported by ULI Dollars & Cents and ERA's knowledge of market performance (as described in the footnotes to Table A-2). The result is an estimated $15.8 billion in retail sales within centers, which is distributed as follows:

[1] U.S. Census Bureau, 2000 Census.
[2] As reported by the 2000 Shopping Center Directory published by Interactive Market Systems, Inc.

Figure 1
Distribution of Sales Occurring in Centers by Center Type

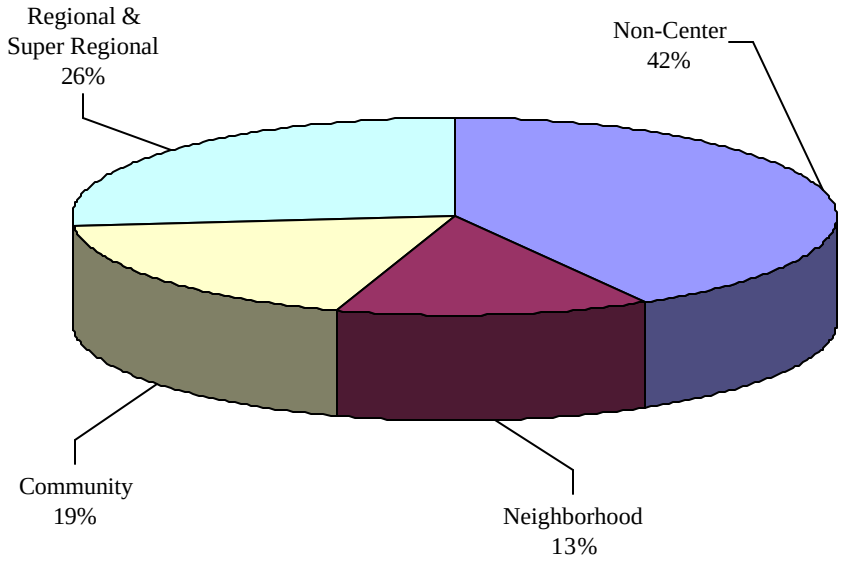


To determine the magnitude of retail sales occurring ***outside*** retail centers, in strip outlets, stand alone retail stores, and retail districts, ERA took the Estimated Retail Sales in San Diego County (from Table A-1), and subtracted the $15.8 billion estimated to occur within neighborhood, community, and regional and super-regional centers. The resulting $11.3 billion is approximately 42 percent of total sales. This means that sales occurring within shopping centers are an estimated 58 percent of sales (distributed between neighborhood, community, and regional/super-regional centers as shown above in **Figure 1**). The resulting distribution of retail sales across center ***and*** non-center outlets is presented in Figure 2.

Table A-3 presents estimated buying power by Community Plan Area (CPA) and CPA Subarea Groups in 2020. This exercise uses projected household population and household size assumptions[3] to determine the number of future households in each CPA. 2030 mean income forecasts for each CPA[4] were estimated based on SANDAG's forecast of median household incomes[5], which were multiplied by the estimated percent of household income spent on retail items (explained below) to yield the Estimated Annual Expenditures

[3] Provided by the County.
[4] SANDAG DataWarehouse (2020 Cities/County Forecast) adjusted for inflation to 2001 dollars.
[5] Mean income forecasts data for CPAs is not available. ERA compared CPA median income estimates (2000, per SANDAG) and mean income in related county areas according to the 2000 Census to estimate mean income for each CPA. This assumes that income distribution in each CPA will remain constant. The income distribution in San Dieguito, however, is expected to change with

Figure 2
Distribution of Total Estimated Retail Sales



per Household within each CPA (presented in inflation adjusted 2001 dollars). ERA multiplied the Estimated Annual Expenditures per Household by the Estimated Build-out Households, resulting in Estimated CPA Buying Power by build-out (presented in inflation adjusted 2001 dollars). The proportion of household income spent on retail items is adjusted for each CPA given their respective incomes, but not proportionately. Retail expenditures per household is not proportional with changes in income due to a marginal reduction in the propensity to consume as income rises, based on information from the Bureau of Labor Statistics' annual Consumer Expenditures report.[6]

Table A-4 uses the distribution of retail sales occurring in neighborhood center, community center, regional/super-regional center, and non-center outlets determined in Table A-2 to estimate the distribution of CPA buying power (from Table A-3) across these center and non-center outlets. Tables A-5 through A-8 use the Estimated Buying Power by Center Type (from Table A-4) to estimate the supportable gross acres of retail land for each center type, and in non-centers.

Each household will spend a portion of retail dollars outside their own CPA, either in another CPA or in another county jurisdiction. To account for this, a capture rate[7] is applied to the Estimated Buying Power for each center type, resulting in estimates of

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the addition of more middle-income housing, thus the ratio for this CPA was reduced based on the current rate and the average rate in other CPAs.

[6] "Consumer Expenditures in 2000", U.S. Department of Labor Bureau of Labor Statistics, available at www.bls.gov/cex/csxann00.pdf (2000 is the most recent survey published).

[7] The percent of total resident household retail expenditures that potentially might occur in retail outlets, if provided, in the resident-household's CPA.

captured sales. This iteration of the model uses a capture rate of 90 percent for neighborhood and community centers, and non-center outlets, because in most cases the majority of spending in these types of retail outlets would tend to be within the local community, if the retail outlets are made available. This is an aggressive assumption so as not to underestimate demand for retail land. It should be recognized that many smaller communities, however, lack the critical mass to support their own retail outlets, thus residents must shop in surrounding CPAs.

A capture rate of 0 percent was used for regional/super-regional centers because none of the CPAs have this type of center (thus CPA residents cannot expend money at regional/super-regional centers within their own communities), and none of the CPAs have a large enough population (current or projected) to support a regional center. Market support for a regional center would require multiple CPAs and access to populations in incorporated cities within the center's market area, and must be evaluated on a case-by-case basis.

As shown on Tables A-5 through A-8, the model applies an average sales per square foot factor (from Table A-2) to estimated captured sales in each CPA, producing an estimate of supportable square feet for neighborhood and community retail centers and non-center retail outlets in each CPA. Estimated supportable square footage is converted into acres using a standard floor area ratio (FAR) assumption, which is based on the average FAR in communities served by the County Water Authority (0.25), and those that are not (0.16). The result is the estimated net acreage supportable, which is then converted to gross acres (assuming net acreage equals approximately 85 percent of gross acreage). Table A-9 summarizes the estimated supportable net and gross acreage for each CPA.

Tables A-10 through A-12 compares the estimate of resident-supported retail acres (as summarized on Table A-9), with currently developed retail acres as of 2002 (Table A-10), gross retail acres allowed under the current General Plan (Table A-11), and gross retail acres allowed under the proposed General Plan (Table A-12) in each CPA. For the proposed General Plan comparison, the retail land supply included portions of Neighborhood Commercial, General Commercial, Service Commercial, and Rural Commercial designations.

County staff estimated retail acres in Specific Plan Areas (SPAs), under the current and proposed general plans.

Negative numbers (in parentheses) indicate deficits, areas where further development may be supportable. Positive numbers indicate a surplus, which implies that these CPAs serve broader markets that serve non-residents such as tourists, travelers, or residents from surrounding communities, have other commercial uses on the land besides the household expenditures analyzed, have surplus land for future growth beyond the planning period, or have too much retail land planned. These communities are candidates for reducing the amount of retail land planned, but should first be evaluated on a case-by-case basis to determine that there are no other extenuating reasons these communities support more retail land than their resident population warrants.

Forecasted Demand vs. 2002 Developed Retail Land

As Table A-10 (found in the Appendix) shows, the following CPA/Subarea Groups had surpluses/deficits of currently developed retail acres compared with estimated future demand based on County population projections:

CPAs with a Possible Developed Retail Land Surplus:

- Central Mountain/Pine Valley
- Desert/Borrego Springs
- Julian
- Lakeside
- Mountain Empire/Boulevard
- Mountain Empire/Jacumba
- Mountain Empire/Lake Moreno/Campo
- Mountain Empire/Tecate
- North Mountain
- North Mountain/Palomar Mountain
- Pendleton-De Luz
- Rainbow
- Ramona
- Spring Valley
- Valle De Oro

CPAs with a Possible Developed Retail Land Deficit:

- Alpine
- Bonsall
- Central Mountain
- Central Mountain/Cuyamaca
- Central Mountain/Descanso
- County Islands
- Crest/Dehesa
- Desert
- Fallbrook
- Jamul-Dulzura
- Mountain Empire
- Mountain Empire/Potrero
- North County Metro
- North County Metro/Hidden Meadows
- North County Metro/Twin Oaks
- Otay
- Pala-Pauma
- San Dieguito
- Sweetwater
- Valley Center

The CPAs that have more retail land currently developed than needed to serve the projected population more than likely serve non-resident populations, such as tourists, travelers, or residents of surrounding communities. The CPAs that have a possible deficit may need additional land capacity if the current and proposed General Plan does not provide room for anticipated growth.

Forecasted Demand vs. Planned Retail Land Under Current General Plan

As shown in Table A-11 (in the Appendix), for the majority of communities, the current General Plan allows sufficient retail acreage in comparison with estimated supportable acreage:

CPAs with a Possible Planned Retail Land Surplus:

- Alpine
- Bonsall
- Central Mountain/Pine Valley
- Desert/Borrego Springs
- Fallbrook
- Jamul-Dulzura
- Julian
- Lakeside
- Mountain Empire
- Mountain Empire/Boulevard
- Mountain Empire/Jacumba
- Mountain Empire/Lake Morena-Campo
- Mountain Empire/Potrero
- Mountain Empire/Tecate
- North County Metro/Hidden Meadows
- North County Metro/Twin Oaks
- Otay
- Pala-Pauma
- Rainbow
- Ramona
- Spring Valley
- Valle De Oro
- Valley Center

CPAs with a Possible Planned Retail Land Deficit:

- Central Mountain
- Central Mountain/Cuyamaca
- Central Mountain/Descanso
- County Islands
- Crest/Dehesa
- Desert
- North County Metro
- North Mountain/North Mountain
- North Mountain/Palomar Mountain
- Pendleton-De Luz
- San Dieguito
- Sweetwater

The communities with a surplus of retail land designated under the current General Plan may not need any more land designated unless there is a compelling reason the land is needed to serve non-resident populations. Some of these communities may be candidates to reduce the amount of retail land designated. The communities that have a deficit may need additional retail land designated unless other communities adequately serve them.

Forecasted Demand vs. Planned Retail Land Under the Proposed Baseline General Plan Scenario

Finally, as Table A-12 (in the Appendix) shows, a similar list of communities would have shortages and surpluses of retail acreage under the Proposed General Plan as follows:

CPAs with a Possible Planned Retail Land Surplus:

- Alpine
- Bonsall
- Central Mountain/Cuyamaca
- Central Mountain/Descanso
- Central Mountain/Pine Valley
- Desert
- Desert/Borrego Springs
- Fallbrook
- Jamul-Dulzura
- Julian
- Lakeside
- Mountain Empire
- Mountain Empire/Boulevard
- Mountain Empire/Jacumba
- Mountain Empire/Lake Morena-Campo
- Mountain Empire/Potrero
- Mountain Empire/Tecate
- North County Metro/Twin Oaks
- North Mountain
- Otay
- Pala-Pauma
- Rainbow
- Ramona
- Spring Valley
- Valle De Oro
- Valley Center

CPAs with a Possible Planned Retail Land Deficit:

- Central Mountain
- County Islands
- Crest/Dehesa
- North County Metro
- North County Metro/Hidden Meadows
- North Mountain/Palomar Mountain
- Pendleton-De Luz
- San Dieguito
- Sweetwater

Sensitivity Analysis

The above analysis assumes that retail outlets in county areas are average performers on a sales per square foot basis. ERA conducted a sensitivity analysis to determine how lower sales per square foot levels affect projected surpluses/deficits. Reducing sales per square foot increases the amount of supportable retail land; however, the amount of the increase depends upon population and income factors. Sensitivity Scenario 1, shown in Tables A-13 through A-20, tests the demand for retail acreage at lower sales per square foot. Under Sensitivity Scenario 1, average sales are assumed to be $200 per square foot for neighborhood and community centers and non-center outlets. Tables A-13 through A-16 present estimated supportable gross acreage by center type, and Table A-17 presents a summary of this information.

Table A-18 presents a comparison of estimated supportable retail acres under Scenario 1 and current developed retail acres. Only Rainbow would switch from a slight surplus to a slight deficit.

Table A-19 presents a comparison of estimated supportable retail acres under Sensitivity Scenario 1 and gross retail acreage allowed under the existing General Plan. None of the communities change from a surplus to a deficit.

Table A-20 presents a comparison of estimated supportable retail acres under Sensitivity Scenario 1 and current developed retail acres. The following communities, which reflect a surplus under the original model, would experience a deficit:

- Central Mountain/Cuyamaca
- Central Mountain/Descanso

The Board Alternative

The Board of Supervisors Alternative, as of August 2004, slightly changes the population and land use distribution for a few communities. These changes were applied to the model and are presented in Appendix B (tables B-1 through B-20). While there were some changes in the estimated amounts, none of the communities experienced a change between surplus and deficits.

Employment Lands Projections

Tables C-1 through C-8 present projections of industrial and office employment lands.

Industrial Land Projections

Table C-1 presents demand projections for industrial space by CPA, based on SANDAG employment forecasts for 2020 (based on SANDAG's 2020 Cities/County Forecast) as prepared for the county in 2002. Total employment using industrial space[8] is multiplied by an average square foot factor per employee based on the year 2000 countywide average, resulting in an estimate of space demand in 2020, net incremental acreage demanded in 2020 period, and gross acreage demanded in 2020. Tables C-2 through C-4 compare the Gross Acres Demanded in 2020 from Table C-1 with (1) current developed industrial acres (Table C-2), (2) industrial land allowed in 2020 under the current general plan (Table C-3), and (3) industrial land allowed under the proposed Baseline General Plan scenario (Table C-4). County staff estimated industrial acres in SPAs in 2002 for inclusion in this analysis.

2020 Demand vs. Current Developed Industrial Land

As presented in Table C-2 in the Appendix, the following CPAs have more or less currently developed industrial lands compared with projected demand for 2020:

CPAs with a Possible Surplus of Developed Industrial Lands:

- County Islands
- Lakeside
- Mountain Empire
- Pendleton-De Luz
- San Dieguito
- Spring Valley

CPAs with a Possible Deficit of Developed Industrial Lands:

- Alpine
- Bonsall
- Central Mountain
- Crest/Dehesa
- Desert
- Fallbrook
- Jamul-Dulzura
- Julian
- North County Metro
- North Mountain
- Otay
- Pala-Pauma
- Rainbow
- Ramona
- Sweetwater
- Valle de Oro
- Valley Center

[8] Includes 97% of manufacturing employment; 20% of construction; 40 percent of transportation, communications and public utilities (TCPU) employment; 100% of wholesale trade employment; and 25 percent of services employment.

The communities with more industrial land currently developed than needed to satisfy SANDAG's forecast of future industrial jobs within the community may presently have industrial uses that have a greater than average amount of industrial space and land per employee, such as warehousing, distribution, industrial yards, etc. If their industrial profile remains the same by 2020, the projected industrial employment in those CPA's may need more land than estimated here. The surplus developed land, however, may also indicate some under-utilized occupied industrial land that could be used more efficiently, especially if the future industrial profile of the CPA changes over time to industrial uses that require less space per worker.

2020 Demand vs. Planned Industrial Land Under the Current General Plan

As shown in Table C-3 in the Appendix, the following CPAs have more/less industrial lands allowed under the current general plan compared with projected demand for 2020:

CPAs with a Possible Surplus of Industrial Land Planned:

- Alpine
- Central Mountain
- Desert
- Fallbrook
- Julian
- Lakeside
- Mountain Empire
- North Mountain
- Otay
- Ramona
- San Dieguito
- Spring Valley
- Valley Center

CPAs with Possible Deficit of Industrial Land Planned:

- Bonsall
- County Islands
- Crest/Dehesa
- Jamul-Dulzura
- North County Metro
- Pala-Pauma
- Pendleton-De Luz
- Rainbow
- Sweetwater
- Valle de Oro

2020 Demand vs. Planned Industrial Land Under the Proposed Baseline General Plan Scenario

Finally, Table C-4 compares industrial acreage allowed under the proposed Baseline General Plan Scenario (as of July 2004) with 2020 demand estimates; surpluses and deficits are as follows:

CPAs with a Possible Surplus of Industrial Land Planned:

- Alpine
- Central Mountain
- County Islands
- Desert
- Fallbrook
- Julian
- Lakeside
- Mountain Empire
- Otay
- Ramona
- San Dieguito
- Spring Valley
- Valley Center

CPAs with a Possible Deficit of Industrial Land Planned:

- Bonsall
- Crest/Dehesa
- Jamul-Dulzura
- North County Metro
- North Mountain
- Pala-Pauma
- Pendleton-De Luz
- Rainbow
- Sweetwater
- Valle de Oro

Similar to the comparison of industrial lands that are currently developed, communities that show possible surpluses of planned industrial land may contain industrial uses in the future with lower than average employment density per square foot, such as warehousing and distribution. These communities will require more land than employment projections based on averages would imply. Alternatively, the surpluses may imply that some communities will have underutilized and inefficiently used industrial land in the future that could lead to blighting conditions. Finally, a surplus may simply mean that a community has additional capacity for job growth beyond 2020. These possibilities must be evaluated on a case-by-case basis.

Office Land Projections

Tables C-5 through C-8 repeat the above process for commercial office space, using SANDAG estimates of employment in 2020 in industries using office space.[9] Estimated demand for office space was compared to the amount of Office Professional land, and portions of General Commercial, Rural Commercial, and Limited Impact Industrial land designated.

[9] Includes 3% of manufacturing employment; 35% of transportation, communications and public utilities (TCPU) employment; 100% of finance, insurance, and real estate (FIRE) employment; 35% of services employment; and 5% of self employed and domestic employment.

County staff estimated office acres in Specific Plan Areas (SPAs) in 2002 for inclusion in this analysis. Table C-5 presents demand projections for office space in 2020 by CPA and Tables C-6 through C-8 compare the Gross Acres Demanded in 2020 from Table C-5 with (1) currently developed office acres (Table C-6), (2) office land allowed in 2020 under the current general plan (Table C-7), and (3) office land allowed under the proposed general plan (Table C-8).

As presented in Table C-6, all CPAs have less currently developed acres of office lands than needed to satisfy projected demand in 2020, except for possibly North Mountain and Pendleton-De Luz.

As shown in Table C-7, all CPAs have a surplus of office lands allowed under the current General Plan compared with projected demand in 2020 except for possibly County Islands, Crest/Dehesa, North County Metro, and Pendleton-De Luz.

2020 Demand vs. Planned Office Land Under the Proposed Baseline General Plan Scenario

Table C-8 compares office acreage allowed under the proposed Baseline General Plan Scenario (as of July 2004) with 2020 demand estimates; surpluses and deficits are presented below.

Much of the surplus in many communities is the amount of General Commercial land designated, which allows office uses. Again, communities that show surpluses of existing or proposed office land may contain office uses with lower than average employment density per square foot and thus require more land than employment projections based on averages would imply, but this is less likely than it is for the industrial analysis. Also, surpluses allow extra capacity for office-related job growth beyond 2020.

CPAs with a Possible Surplus of Office Land Planned:

- Alpine
- Bonsall
- Central Mountain
- County Islands
- Desert
- Fallbrook
- Jamul-Dulzura
- Julian
- Lakeside
- Mountain Empire
- North County Metro
- Otay
- Pala Pauma
- Rainbow
- Ramona
- San Dieguito
- Spring Valley
- Sweetwater
- Valle de Oro
- Valley Center

CPAs with a Possible Deficit of Office Land Planned:

- Crest/Dehesa
- Pendleton-De Luz

Summary

As with the retail analysis, these comparisons of estimated future demand for industrial and office land compared to planned supply are preliminary comparisons based on countywide averages and assumptions. They should be used as a starting point for a community-by-community assessment to account for the unique circumstances of each community rather than as definitive recommendations.

Finally, to the extent that surplus land is planned for each land use, they may reflect capacity for future absorption beyond the County's General Plan horizon, or, in the case of employment lands, the year 2020 demand for land.

Table A-1

Total Estimated Sales in Retail Outlets to San Diego Residents
('000 of 2001 $)

	'000 of 2001 Dollars
Estimated Selected Retail Expenditures[1]	$27,066,361
Less: Estimated Tourism Related Spending[2]	$335,288
Less: Estimated Expenditures by Mexican Residents[3]	$1,467
Estimated Selected Resident Expenditures[4]	$26,729,606
Total San Diego County Households (2000)[5]	994,677
Estimated Selected Resident Expenditures Per Household	$26,873

[1]Based on taxable retail sales in retail outlets San Diego County in 2000 (adjusted for inflation to 2001 dollars) plus non-taxable transactions at drug stores and food stores; Excludes new and used auto sales, and boat, motorcycle and plane dealers.

[2]Based on the distribution of expenditures presented in the San Diego County Visitor Profile (2000).

[3]An ERA estimate based on data from the 1994 San Diego Dialogue Study "Who Crosses the Border" (presented in 2001 dollars.).

[4]Total retail expenditures minus tourism and Mexican national-related expenditures.

[5]U.S. Census Bureau, 2000 Census.

Source: Economics Research Associates, State Board of Equalization and the U.S. Census Bureau.

Table A-2
Estimated Retail Sales Occurring In Shopping Centers and Outside of Shopping Centers

Estimated Retail Sales in Centers by Type (2001)

	Neighborhood	Community	Regional & Super Regional	Total
GLA of Centers by Type[1]	14,626,771	20,996,191	23,141,056	58,764,018
Average Sales Per Square Foot[2]	$245	$240	$309	$269
Estimated Total Sales	$3,590,385,970	$5,041,338,311	$7,150,586,304	$15,782,310,585
% of Total Sales by Center Type	23%	32%	45%	100%

Estimated Retail Sales Occurring Outside Centers

Estimated Retail Sales in San Diego County, 2001[3]	$27,066,360,540
Estimated Retail Sales In Centers	$15,782,310,585
Retail Sales Occurring Outside of Centers	$11,284,049,955
% of Retail Sales Occurring Outside of Centers	42%

Distribution of Total Estimated Retail Sales

Type of Outlet	% of Sales
Non-Center	42%
Neighborhood	13%
Community	19%
Regional & Super Regional	26%

[1]The Shopping Center Directory (Interactive Market Systems, Inc.). Includes only those centers reporting size.

[2]Community sales per sq.ft. as reported by ULI Dollars & Cents, 2000 (reported in 2001 $). Neighborhood sales per sq.ft. is 80% of ULI figure. Regional & Superregional figure is an ERA estimate based on local data sources and estimates.

[3]Total estimated sales in retail outlets only, less tourism expenditures and expenditures by non-resident Mexican nationals; excludes auto, boat, motorcycle and aircraft sales (see Table 1). Presented in 2001 $.

Source: The Shopping Center Directory, ULI Dollars & Cents (2000), California State Board of Equalization and Economics Research Associates

Table A-3

Buying Power by CPA[1]

Community Planning Area (CPA)	Subarea Group	Estimated Build-out Total Population[1]	Estimated Build-out Group Quarters Population[1]	Estimated Build-out Household Population[1]	Estimated Build-out Household Size1	Estimated Build-out Households[1]	2030 Median Income ($2001)[2]	Estimated 2030 Mean Income ($2001)[3]	Estimated % of Income Spent on Retail Items[4]	Estimated Annual Expenditures Per Household ($2001)	Estimated CPA Resident Buying Power ($2001)
Alpine		29,372	498	28,874	2.908	9,929	$89,389	$136,765	22%	$30,088	$298,751,032
Barona		537	2	535	3.636	147	n/a	n/a	n/a	n/a	n/a
Bonsall	Bonsall	14,566	65	14,501	2.907	4,988	79,047	127,265	22%	27,998	139,663,983
Central Mountain		147	0	147	2.875	51	70,780	57,332	29%	16,626	850,112
Central Mountain	Cuyamaca	613	0	613	2.426	253	70,780	57,332	29%	16,626	4,201,130
Central Mountain	Descanso	2,728	500	2,228	2.696	826	70,780	57,332	29%	16,626	13,740,159
Central Mountain	Pine Valley	2,760	0	2,760	2.746	1,005	70,780	57,332	29%	16,626	16,711,099
County Islands		3,140	1	3,139	3.476	903	93,999	120,319	22%	26,470	23,903,844
Crest/Dehesa		11,119	85	11,034	3.026	3,646	98,298	108,128	22%	23,788	86,740,884
Desert		1,412	71	1,341	2.369	566	47,494	76,465	22%	16,822	9,522,469
Desert	Borrego Springs	14,034	10	14,024	2.345	5,980	47,494	76,465	22%	16,822	100,603,919
Fallbrook		60,987	376	60,611	3.065	19,775	70,826	99,157	22%	21,814	431,385,467
Jamul-Dulzura		21,401	81	21,320	3.194	6,675	98,975	117,780	22%	25,912	172,960,857
Julian		3,922	47	3,875	2.575	1,505	63,584	94,740	22%	20,843	31,365,328
Lakeside[5]		87,862	741	87,121	2.983	29,206	68,920	82,015	22%	18,043	526,969,672
Mountain Empire		239	0	239	2.881	83	49,481	67,294	22%	14,805	1,228,150
Mountain Empire	Boulevard	2,841	179	2,662	2.816	945	49,481	67,294	22%	14,805	13,994,979
Mountain Empire	Jacumba	3,420	0	3,420	2.697	1,268	49,481	67,294	22%	14,805	18,773,360
Mountain Empire	Lake Morena/Campo	4,966	300	4,666	2.866	1,628	49,481	67,294	22%	14,805	24,102,683
Mountain Empire	Potrero	2,234	0	2,234	3.238	690	49,481	67,294	22%	14,805	10,214,172
Mountain Empire	Tecate	433	0	433	2.891	150	49,481	67,294	22%	14,805	2,217,362
North County Metro		64,912	550	64,362	3.146	20,458	81,787	92,419	22%	20,332	415,964,621
North County Metro	Hidden Meadows	11,293	77	11,216	2.716	4,130	81,787	92,419	22%	20,332	83,964,135
North County Metro	Twin Oaks	4,034	8	4,026	2.986	1,348	81,787	92,419	22%	20,332	27,413,819
North Mountain	North Mountain	5,281	152	5,129	2.571	1,995	47,814	55,464	29%	16,085	32,087,802
North Mountain	Palomar Mountain	522	0	522	2.306	226	47,814	55,464	29%	16,085	3,640,999
Otay		13,484	8,071	5,413	2.888	1,874	94,913	121,489	22%	26,728	50,095,697
Pala-Pauma	Pala-Pauma	12,674	132	12,542	3.521	3,562	64,123	82,077	22%	18,057	64,319,923
Pendleton-De Luz		38,341	16,175	22,166	3.556	6,233	50,282	55,813	29%	16,186	100,892,862
Rainbow		3,516	8	3,508	2.896	1,211	65,959	60,022	29%	17,406	21,084,911
Ramona		53,409	266	53,143	3.221	16,499	80,866	97,040	22%	21,349	352,231,075
San Dieguito		32,333	8	32,325	2.850	11,342	138,193	178,269	22%	39,219	444,828,886
Spring Valley		66,862	388	66,474	3.232	20,567	65,279	71,807	22%	15,798	324,916,238
Sweetwater		15,276	155	15,121	3.155	4,793	94,676	111,718	22%	24,578	117,794,963
Valle De Oro		42,851	225	42,626	2.948	14,459	92,458	118,346	22%	26,036	376,463,388
Valley Center		40,842	99	40,743	3.082	13,220	74,601	93,997	22%	20,679	273,374,591
Community Planning Areas Total		**674,363**	**29,270**	**645,093**	**--**	**212,140**	--		--	--	**$4,616,974,570**

[1]Under Proposed General Plan population and size assumptions for the July 2004 Baseline scenario provided by the County.
[2]Based on SANDAG 2030 Cities/County Forecast (presented in $ 2001).
[3]ERA estimate based on current relationship between median and mean incomes (as reported by SANDAG and Census data).
[4]Based on ratios of expenditures to income reported in "Consumer Expenditures in 2000", Bureau of Labor Statistics.
[5]Pepper Drive/Bostonia CPA merged into Lakeside CPA
[6]Including incorporated areas.

Sources: Technology Associates International Corporation, State of California Board of Equalization, and Economics Research Associates.

Table A-4
Resident Buying Power by Type of Center

Community Planning Area (CPA)	Subarea Group	Estimated CPA Resident Buying Power ($2001)	Estimated Buying Power by Type of Center ($2001)[1] 13% Neighborhood	19% Community	26% Regional & Super Regional	42% Non-Center
Alpine		$298,751,032	$39,629,691	$55,644,904	$78,926,202	$124,550,235
Barona		n/a	n/a	n/a	n/a	n/a
Bonsall	Bonsall	139,663,983	18,526,599	26,013,597	36,897,438	58,226,349
Central Mountain		850,112	112,768	158,340	224,589	354,414
Central Mountain	Cuyamaca	4,201,130	557,285	782,496	1,109,885	1,751,464
Central Mountain	Descanso	13,740,159	1,822,649	2,559,221	3,629,974	5,728,315
Central Mountain	Pine Valley	16,711,099	2,216,748	3,112,583	4,414,859	6,966,909
County Islands		23,903,844	3,170,874	4,452,293	6,315,090	9,965,587
Crest/Dehesa		86,740,884	11,506,285	16,156,222	22,915,832	36,162,545
Desert		9,522,469	1,263,167	1,773,640	2,515,714	3,969,947
Desert	Borrego Springs	100,603,919	13,345,233	18,738,330	26,578,269	41,942,087
Fallbrook		431,385,467	57,223,812	80,349,188	113,966,523	179,845,944
Jamul-Dulzura		172,960,857	22,943,470	32,215,421	45,694,046	72,107,920
Julian		31,365,328	4,160,649	5,842,057	8,286,319	13,076,303
Lakeside[2]		526,969,672	69,903,174	98,152,553	139,218,648	219,695,296
Mountain Empire		1,228,150	162,916	228,753	324,462	512,020
Mountain Empire	Boulevard	13,994,979	1,856,451	2,606,683	3,697,294	5,834,550
Mountain Empire	Jacumba	18,773,360	2,490,309	3,496,697	4,959,682	7,826,672
Mountain Empire	Lake Morena/Campo	24,102,683	3,197,251	4,489,328	6,367,621	10,048,484
Mountain Empire	Potrero	10,214,172	1,354,922	1,902,476	2,698,454	4,258,320
Mountain Empire	Tecate	2,217,362	294,136	413,002	585,799	924,425
North County Metro		415,964,621	55,178,218	77,476,925	109,892,533	173,416,945
North County Metro	Hidden Meadows	83,964,135	11,137,946	15,639,029	22,182,251	35,004,909
North County Metro	Twin Oaks	27,413,819	3,636,477	5,106,055	7,242,381	11,428,907
North Mountain	North Mountain	32,087,802	4,256,486	5,976,624	8,477,187	13,377,505
North Mountain	Palomar Mountain	3,640,999	482,983	678,167	961,905	1,517,944
Otay		50,095,697	6,645,256	9,330,747	13,234,642	20,885,052
Pala-Pauma	Pala-Pauma	64,319,923	8,532,117	11,980,129	16,992,501	26,815,176
Pendleton-De Luz		100,892,862	13,383,562	18,792,148	26,654,604	42,062,548
Rainbow		21,084,911	2,796,939	3,927,243	5,570,364	8,790,365
Ramona		352,231,075	46,723,885	65,606,013	93,054,945	146,846,231
San Dieguito		444,828,886	59,007,098	82,853,138	117,518,103	185,450,547
Spring Valley		324,916,238	43,100,538	60,518,394	85,838,715	135,458,591
Sweetwater		117,794,963	15,625,647	21,940,307	31,119,923	49,109,087
Valle De Oro		376,463,388	49,938,331	70,119,486	99,456,813	156,948,758
Valley Center		273,374,591	36,263,475	50,918,327	72,222,071	113,970,718
Total		$4,616,974,570	$612,447,348	$859,950,519	$1,219,745,635	$1,924,831,069

[1]Based on distribution established in Table 2.
[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA.

Sources: Technology Associates International Corporation, California State Board of Equalization, and Economics Research Associates.

Table A-5
Resident Supported Gross Acres of Retail Space in Neighborhood Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Neighborhood Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$39,629,691	90%	$35,666,722	$245	145,302	0.25	13.34	15.70
Barona		n/a	90%	n/a	245	n/a	0.25	n/a	n/a
Bonsall	Bonsall	18,526,599	90%	16,673,939	245	67,927	0.25	6.24	7.34
Central Mountain		112,768	90%	101,492	245	413	0.16	0.06	0.07
Central Mountain	Cuyamaca	557,285	90%	501,557	245	2,043	0.16	0.29	0.34
Central Mountain	Descanso	1,822,649	90%	1,640,384	245	6,683	0.16	0.96	1.13
Central Mountain	Pine Valley	2,216,748	90%	1,995,073	245	8,128	0.16	1.17	1.37
County Islands		3,170,874	90%	2,853,787	245	11,626	0.25	1.07	1.26
Crest/Dehesa		11,506,285	90%	10,355,656	245	42,188	0.25	3.87	4.56
Desert		1,263,167	90%	1,136,850	245	4,631	0.16	0.66	0.78
Desert	Borrego Springs	13,345,233	90%	12,010,710	245	48,930	0.16	7.02	8.26
Fallbrook		57,223,812	90%	51,501,431	245	209,810	0.25	19.27	22.67
Jamul-Dulzura		22,943,470	90%	20,649,123	245	84,122	0.25	7.72	9.09
Julian		4,160,649	90%	3,744,584	245	15,255	0.16	2.19	2.58
Lakeside[6]		69,903,174	90%	62,912,857	245	256,299	0.25	23.54	27.69
Mountain Empire		162,916	90%	146,624	245	597	0.16	0.09	0.10
Mountain Empire	Boulevard	1,856,451	90%	1,670,806	245	6,807	0.16	0.98	1.15
Mountain Empire	Jacumba	2,490,309	90%	2,241,278	245	9,131	0.16	1.31	1.54
Mountain Empire	Lake Morena/Campo	3,197,251	90%	2,877,526	245	11,723	0.16	1.68	1.98
Mountain Empire	Potrero	1,354,922	90%	1,219,430	245	4,968	0.16	0.71	0.84
Mountain Empire	Tecate	294,136	90%	264,722	245	1,078	0.16	0.15	0.18
North County Metro		55,178,218	90%	49,660,396	245	202,310	0.25	18.58	21.86
North County Metro	Hidden Meadows	11,137,946	90%	10,024,151	245	40,837	0.25	3.75	4.41
North County Metro	Twin Oaks	3,636,477	90%	3,272,829	245	13,333	0.25	1.22	1.44
North Mountain	North Mountain	4,256,486	90%	3,830,838	245	15,606	0.16	2.24	2.63
North Mountain	Palomar Mountain	482,983	90%	434,685	245	1,771	0.16	0.25	0.30
Otay		6,645,256	90%	5,980,730	245	24,365	0.16	3.50	4.11
Pala-Pauma	Pala-Pauma	8,532,117	90%	7,678,905	245	31,283	0.25	2.87	3.38
Pendleton-De Luz		13,383,562	90%	12,045,206	245	49,071	0.25	4.51	5.30
Rainbow		2,796,939	90%	2,517,245	245	10,255	0.25	0.94	1.11
Ramona		46,723,885	90%	42,051,496	245	171,312	0.25	15.73	18.51
San Dieguito		59,007,098	90%	53,106,388	245	216,349	0.25	19.87	23.37
Spring Valley		43,100,538	90%	38,790,484	245	158,027	0.25	14.51	17.07
Sweetwater		15,625,647	90%	14,063,082	245	57,291	0.25	5.26	6.19
Valle De Oro		49,938,331	90%	44,944,498	245	183,098	0.25	16.81	19.78
Valley Center		36,263,475	90%	32,637,128	245	132,959	0.25	12.21	14.36
Total		**$612,447,348**	**--**	**$551,202,613**	**--**	**2,245,529**	**--**	**214.58**	**252.44**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.

[2]80% of average sales per sq.ft. for neighborhood centers reported by ULI Dollars & Cents of Shopping Centers 2000 for the western United States, reported in 2001 dollars.
[3]Estimated buying power divided by average sales per square foot.
[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).
[5]Net acreage equal to 85% of gross acreage.
[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-6
Resident Supported Gross Acres of Retail Space in Community Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Community Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$55,644,904	90%	$50,080,413	$240	208,575	0.25	19.15	22.53
Barona		n/a	90%	n/a	240	0	0.25	0	0
Bonsall	Bonsall	26,013,597	90%	23,412,237	240	97,507	0.25	8.95	10.53
Central Mountain		158,340	90%	142,506	240	594	0.16	0.09	0.10
Central Mountain	Cuyamaca	782,496	90%	704,246	240	2,933	0.16	0.42	0.50
Central Mountain	Descanso	2,559,221	90%	2,303,299	240	9,593	0.16	1.38	1.62
Central Mountain	Pine Valley	3,112,583	90%	2,801,325	240	11,667	0.16	1.67	1.97
County Islands		4,452,293	90%	4,007,064	240	16,689	0.25	1.53	1.80
Crest/Dehesa		16,156,222	90%	14,540,600	240	60,559	0.25	5.56	6.54
Desert		1,773,640	90%	1,596,276	240	6,648	0.16	0.95	1.12
Desert	Borrego Springs	18,738,330	90%	16,864,497	240	70,237	0.16	10.08	11.86
Fallbrook		80,349,188	90%	72,314,269	240	301,175	0.25	27.66	32.54
Jamul-Dulzura		32,215,421	90%	28,993,879	240	120,754	0.25	11.09	13.05
Julian		5,842,057	90%	5,257,852	240	21,898	0.16	3.14	3.70
Lakeside[6]		98,152,553	90%	88,337,298	240	367,908	0.25	33.78	39.75
Mountain Empire		228,753	90%	205,878	240	857	0.16	0.12	0.14
Mountain Empire	Boulevard	2,606,683	90%	2,346,015	240	9,771	0.16	1.40	1.65
Mountain Empire	Jacumba	3,496,697	90%	3,147,027	240	13,107	0.16	1.88	2.21
Mountain Empire	Lake Morena/Campo	4,489,328	90%	4,040,396	240	16,827	0.16	2.41	2.84
Mountain Empire	Potrero	1,902,476	90%	1,712,228	240	7,131	0.16	1.02	1.20
Mountain Empire	Tecate	413,002	90%	371,702	240	1,548	0.16	0.22	0.26
North County Metro		77,476,925	90%	69,729,232	240	290,409	0.25	26.67	31.37
North County Metro	Hidden Meadows	15,639,029	90%	14,075,126	240	58,620	0.25	5.38	6.33
North County Metro	Twin Oaks	5,106,055	90%	4,595,450	240	19,139	0.25	1.76	2.07
North Mountain	North Mountain	5,976,624	90%	5,378,962	240	22,402	0.16	3.21	3.78
North Mountain	Palomar Mountain	678,167	90%	610,350	240	2,542	0.16	0.36	0.43
Otay		9,330,747	90%	8,397,672	240	34,975	0.16	5.02	5.90
Pala-Pauma	Pala-Pauma	11,980,129	90%	10,782,116	240	44,905	0.25	4.12	4.85
Pendleton-De Luz		18,792,148	90%	16,912,933	240	70,439	0.25	6.47	7.61
Rainbow		3,927,243	90%	3,534,518	240	14,721	0.25	1.35	1.59
Ramona		65,606,013	90%	59,045,412	240	245,913	0.25	22.58	26.57
San Dieguito		82,853,138	90%	74,567,824	240	310,560	0.25	28.52	33.55
Spring Valley		60,518,394	90%	54,466,555	240	226,843	0.25	20.83	24.51
Sweetwater		21,940,307	90%	19,746,276	240	82,239	0.25	7.55	8.88
Valle De Oro		70,119,486	90%	63,107,538	240	262,831	0.25	24.14	28.39
Valley Center		50,918,327	90%	45,826,494	240	190,858	0.25	17.53	20.62
Total		**$859,950,519**	--	**$773,955,467**	--	**3,223,374**	--	**308.02**	**362.37**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.
[2]Based on ULI Dollars & Cents of Shopping Centers (2000) for the western United States, reported in 2001 dollars.
[3]Estimated buying power divided by average sales per square foot.
[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).
[5]Net acreage equal to 85% of gross acreage.
[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-7
Resident Supported Gross Acres of Retail Space in Regional and Super Regional Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Regional & Super-Regional Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$78,926,202	0%	$0	$309	-	0.25	-	-
Barona		n/a	0%	n/a	309	n/a	0.25	n/a	n/a
Bonsall	Bonsall	36,897,438	0%	0	309	-	0.25	-	-
Central Mountain		224,589	0%	0	309	-	0.16	-	-
Central Mountain	Cuyamaca	1,109,885	0%	0	309	-	0.16	-	-
Central Mountain	Descanso	3,629,974	0%	0	309	-	0.16	-	-
Central Mountain	Pine Valley	4,414,859	0%	0	309	-	0.16	-	-
County Islands		6,315,090	0%	0	309	-	0.25	-	-
Crest/Dehesa		22,915,832	0%	0	309	-	0.25	-	-
Desert		2,515,714	0%	0	309	-	0.16	-	-
Desert	Borrego Springs	26,578,269	0%	0	309	-	0.16	-	-
Fallbrook		113,966,523	0%	0	309	-	0.25	-	-
Jamul-Dulzura		45,694,046	0%	0	309	-	0.25	-	-
Julian		8,286,319	0%	0	309	-	0.16	-	-
Lakeside[6]		139,218,648	0%	0	309	-	0.25	-	-
Mountain Empire		324,462	0%	0	309	-	0.16	-	-
Mountain Empire	Boulevard	3,697,294	0%	0	309	-	0.16	-	-
Mountain Empire	Jacumba	4,959,682	0%	0	309	-	0.16	-	-
Mountain Empire	Lake Morena/Campo	6,367,621	0%	0	309	-	0.16	-	-
Mountain Empire	Potrero	2,698,454	0%	0	309	-	0.16	-	-
Mountain Empire	Tecate	585,799	0%	0	309	-	0.16	-	-
North County Metro		109,892,533	0%	0	309	-	0.25	-	-
North County Metro	Hidden Meadows	22,182,251	0%	0	309	-	0.25	-	-
North County Metro	Twin Oaks	7,242,381	0%	0	309	-	0.25	-	-
North Mountain	North Mountain	8,477,187	0%	0	309	-	0.16	-	-
North Mountain	Palomar Mountain	961,905	0%	0	309	-	0.16	-	-
Otay		13,234,642	0%	0	309	-	0.16	-	-
Pala-Pauma	Pala-Pauma	16,992,501	0%	0	309	-	0.25	-	-
Pendleton-De Luz		26,654,604	0%	0	309	-	0.25	-	-
Rainbow		5,570,364	0%	0	309	-	0.25	-	-
Ramona		93,054,945	0%	0	309	-	0.25	-	-
San Dieguito		117,518,103	0%	0	309	-	0.25	-	-
Spring Valley		85,838,715	0%	0	309	-	0.25	-	-
Sweetwater		31,119,923	0%	0	309	-	0.25	-	-
Valle De Oro		99,456,813	0%	0	309	-	0.25	-	-
Valley Center		72,222,071	0%	0	309	-	0.25	-	-
Total		**$1,219,745,635**	**--**	**$0**	**--**	**-**	**--**	**-**	**-**

[1]Assumed percentage of resident expenditures that will occur within CPA.

[2]Based on ERA knowledge of local retail market, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-8
Supportable Square Feet of Retail Space Outside of Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Non-Center ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$124,550,235	90%	$112,095,211	$245	456,661	0.25	41.93	49.33
Barona		n/a	90%	n/a	245	n/a	0.25	n/a	n/a
Bonsall	Bonsall	58,226,349	90%	52,403,714	245	213,486	0.25	19.60	23.06
Central Mountain		354,414	90%	318,973	245	1,299	0.16	0.19	0.22
Central Mountain	Cuyamaca	1,751,464	90%	1,576,318	245	6,422	0.16	0.92	1.08
Central Mountain	Descanso	5,728,315	90%	5,155,484	245	21,003	0.16	3.01	3.55
Central Mountain	Pine Valley	6,966,909	90%	6,270,218	245	25,544	0.16	3.67	4.31
County Islands		9,965,587	90%	8,969,028	245	36,539	0.25	3.36	3.95
Crest/Dehesa		36,162,545	90%	32,546,290	245	132,589	0.25	12.18	14.32
Desert		3,969,947	90%	3,572,952	245	14,556	0.16	2.09	2.46
Desert	Borrego Springs	41,942,087	90%	37,747,878	245	153,780	0.16	22.06	25.96
Fallbrook		179,845,944	90%	161,861,349	245	659,402	0.25	60.55	71.24
Jamul-Dulzura		72,107,920	90%	64,897,128	245	264,383	0.25	24.28	28.56
Julian		13,076,303	90%	11,768,673	245	47,944	0.16	6.88	8.09
Lakeside[6]		219,695,296	90%	197,725,767	245	805,509	0.25	73.97	87.02
Mountain Empire		512,020	90%	460,818	245	1,877	0.16	0.27	0.32
Mountain Empire	Boulevard	5,834,550	90%	5,251,095	245	21,392	0.16	3.07	3.61
Mountain Empire	Jacumba	7,826,672	90%	7,044,005	245	28,696	0.16	4.12	4.84
Mountain Empire	Lake Morena/Campo	10,048,484	90%	9,043,635	245	36,843	0.16	5.29	6.22
Mountain Empire	Potrero	4,258,320	90%	3,832,488	245	15,613	0.16	2.24	2.64
Mountain Empire	Tecate	924,425	90%	831,983	245	3,389	0.16	0.49	0.57
North County Metro		173,416,945	90%	156,075,251	245	635,831	0.25	58.39	68.69
North County Metro	Hidden Meadows	35,004,909	90%	31,504,418	245	128,345	0.25	11.79	13.87
North County Metro	Twin Oaks	11,428,907	90%	10,286,016	245	41,904	0.25	3.85	4.53
North Mountain	North Mountain	13,377,505	90%	12,039,754	245	49,048	0.16	7.04	8.28
North Mountain	Palomar Mountain	1,517,944	90%	1,366,149	245	5,566	0.16	0.80	0.94
Otay		20,885,052	90%	18,796,547	245	76,575	0.16	10.99	12.93
Pala-Pauma	Pala-Pauma	26,815,176	90%	24,133,659	245	98,317	0.25	9.03	10.62
Pendleton-De Luz		42,062,548	90%	37,856,293	245	154,222	0.25	14.16	16.66
Rainbow		8,790,365	90%	7,911,328	245	32,230	0.25	2.96	3.48
Ramona		146,846,231	90%	132,161,608	245	538,409	0.25	49.44	58.17
San Dieguito		185,450,547	90%	166,905,492	245	679,952	0.25	62.44	73.46
Spring Valley		135,458,591	90%	121,912,732	245	496,657	0.25	45.61	53.65
Sweetwater		49,109,087	90%	44,198,178	245	180,058	0.25	16.53	19.45
Valle De Oro		156,948,758	90%	141,253,883	245	575,450	0.25	52.84	62.17
Valley Center		113,970,718	90%	102,573,646	245	417,872	0.25	38.37	45.14
Total		**$1,924,831,069**	**--**	**$1,732,347,962**	**--**	**7,057,363**	**--**	**674.38**	**793.39**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.

[2]80% of average sales per sq.ft. for neighborhood centers reported by ULI Dollars & Cents of Shopping Centers 2000 for the western United States, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-9
Total Resident Supported Retail Acres for Neighborhood, Community & Non-Center Outlets

Community Planning Area (CPA)	Subarea Group	Estimated Net Acreage[1]	Estimated Gross Acreage[2]
Alpine		74.43	87.56
Barona		n/a	n/a
Bonsall	Bonsall	34.80	40.94
Central Mountain		0.33	0.39
Central Mountain	Cuyamaca	1.64	1.92
Central Mountain	Descanso	5.35	6.29
Central Mountain	Pine Valley	6.51	7.65
County Islands		5.96	7.01
Crest/Dehesa		21.61	25.42
Desert		3.71	4.36
Desert	Borrego Springs	39.16	46.07
Fallbrook		107.47	126.44
Jamul-Dulzura		43.09	50.70
Julian		12.21	14.36
Lakeside[3]		131.29	154.46
Mountain Empire		0.48	0.56
Mountain Empire	Boulevard	5.45	6.41
Mountain Empire	Jacumba	7.31	8.60
Mountain Empire	Lake Morena/Campo	9.38	11.04
Mountain Empire	Potrero	3.98	4.68
Mountain Empire	Tecate	0.86	1.02
North County Metro		103.63	121.92
North County Metro	Hidden Meadows	20.92	24.61
North County Metro	Twin Oaks	6.83	8.04
North Mountain	North Mountain	12.49	14.70
North Mountain	Palomar Mountain	1.42	1.67
Otay		19.50	22.94
Pala-Pauma	Pala-Pauma	16.02	18.85
Pendleton-De Luz		25.14	29.57
Rainbow		5.25	6.18
Ramona		87.75	103.24
San Dieguito		110.82	130.38
Spring Valley		80.95	95.23
Sweetwater		29.35	34.53
Valle De Oro		93.79	110.34
Valley Center		68.11	80.13
Total		**1,196.97**	**1,408.20**

[1]Based on an estimated Floor Area Ratio (FAR) of 0.25
[2]Net acreage equal to 85% of gross acreage.
[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-10

Comparison: Retail Land Developed As of 2002 & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Currently Developed Retail Acres with Estimated Resident Supported Acres at Build-out[1]	
			2002 Currently Developed Retail Acres	Surplus/(Deficit)
Alpine		87.56	83.04	(4.52)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	40.94	28.31	(12.63)
Central Mountain		0.39	0.00	(0.39)
Central Mountain	Cuyamaca	1.92	1.48	(0.44)
Central Mountain	Descanso	6.29	4.85	(1.44)
Central Mountain	Pine Valley	7.65	16.81	9.16
County Islands		7.01	1.16	(5.85)
Crest/Dehesa		25.42	5.61	(19.81)
Desert		4.36	0.00	(4.36)
Desert	Borrego Springs	46.07	64.37	18.30
Fallbrook		126.44	110.58	(15.86)
Jamul-Dulzura		50.70	22.14	(28.56)
Julian		14.36	30.67	16.31
Lakeside[3]		154.46	212.43	57.97
Mountain Empire		0.56	0.00	(0.56)
Mountain Empire	Boulevard	6.41	30.41	24.00
Mountain Empire	Jacumba	8.60	12.67	4.07
Mountain Empire	Lake Morena/Campo	11.04	16.44	5.40
Mountain Empire	Potrero	4.68	1.27	(3.41)
Mountain Empire	Tecate	1.02	3.65	2.63
North County Metro		121.92	21.94	(99.98)
North County Metro	Hidden Meadows	24.61	1.28	(23.33)
North County Metro	Twin Oaks	8.04	1.06	(6.98)
North Mountain	North Mountain	14.70	21.64	6.94
North Mountain	Palomar Mountain	1.67	3.45	1.78
Otay		22.94	0.00	(22.94)
Pala-Pauma	Pala-Pauma	18.85	5.67	(13.18)
Pendleton-De Luz		29.57	69.68	40.11
Rainbow		6.18	6.82	0.64
Ramona		103.24	129.69	26.45
San Dieguito		130.38	28.33	(102.05)
Spring Valley		95.23	129.67	34.44
Sweetwater		34.53	10.19	(24.34)
Valle De Oro		110.34	169.88	59.54
Valley Center		80.13	27.41	(52.72)
Total		**1,408.20**	**1,272.60**	**(135.60)**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table A-11

Comparison: Retail Land Planned Under Existing General Plan & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current General Plan with Estimated Resident Supported Acres at Build-out[1]	
			Estimated Gross Acreage Allowed under Current GP	Surplus/(Deficit)
Alpine		87.56	110.18	22.62
Barona		n/a	n/a	n/a
Bonsall	Bonsall	40.94	125.72	84.78
Central Mountain		0.39	0.00	(0.39)
Central Mountain	Cuyamaca	1.92	0.00	(1.92)
Central Mountain	Descanso	6.29	5.46	(0.83)
Central Mountain	Pine Valley	7.65	17.10	9.45
County Islands		7.01	1.10	(5.91)
Crest/Dehesa		25.42	13.68	(11.74)
Desert		4.36	0.00	(4.36)
Desert	Borrego Springs	46.07	333.51	287.44
Fallbrook		126.44	236.51	110.07
Jamul-Dulzura		50.70	87.38	36.68
Julian		14.36	75.03	60.67
Lakeside[3]		154.46	380.77	226.32
Mountain Empire		0.56	28.50	27.94
Mountain Empire	Boulevard	6.41	121.18	114.77
Mountain Empire	Jacumba	8.60	18.20	9.60
Mountain Empire	Lake Morena/Campo	11.04	48.20	37.16
Mountain Empire	Potrero	4.68	14.94	10.26
Mountain Empire	Tecate	1.02	40.23	39.21
North County Metro		121.92	36.90	(85.02)
North County Metro	Hidden Meadows	24.61	39.30	14.69
North County Metro	Twin Oaks	8.04	22.60	14.56
North Mountain	North Mountain	14.70	13.01	(1.69)
North Mountain	Palomar Mountain	1.67	0.00	(1.67)
Otay		22.94	111.20	88.26
Pala-Pauma	Pala-Pauma	18.85	37.08	18.23
Pendleton-De Luz		29.57	0.00	(29.57)
Rainbow		6.18	31.95	25.77
Ramona		103.24	274.25	171.01
San Dieguito		130.38	45.05	(85.33)
Spring Valley		95.23	205.37	110.14
Sweetwater		34.53	29.92	(4.61)
Valle De Oro		110.34	219.73	109.39
Valley Center		80.13	100.21	20.08
Total		**1,408.2**	**2,824.26**	**1,416.06**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.
[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table A-12

Comparison: Retail Land Planned Under Proposed General Plan & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Proposed General Plan with Estimated Resident Supported Acres at Build-out[1]	
			Estimated Gross Acreage Allowed under Proposed GP	Surplus/(Deficit)
Alpine		87.56	134.46	46.90
Barona		n/a	0.00	n/a
Bonsall	Bonsall	40.94	127.77	86.83
Central Mountain		0.39	0.00	(0.39)
Central Mountain	Cuyamaca	1.92	1.98	0.06
Central Mountain	Descanso	6.29	6.63	0.34
Central Mountain	Pine Valley	7.65	19.09	11.44
County Islands		7.01	0.00	(7.01)
Crest/Dehesa		25.42	17.01	(8.41)
Desert		4.36	18.79	14.43
Desert	Borrego Springs	46.07	281.51	235.44
Fallbrook		126.44	240.18	113.74
Jamul-Dulzura		50.70	88.28	37.58
Julian		14.36	71.65	57.29
Lakeside[3]		154.46	380.77	226.32
Mountain Empire		0.56	28.50	27.94
Mountain Empire	Boulevard	6.41	122.17	115.76
Mountain Empire	Jacumba	8.60	24.50	15.90
Mountain Empire	Lake Morena/Campo	11.04	51.39	40.35
Mountain Empire	Potrero	4.68	24.30	19.62
Mountain Empire	Tecate	1.02	54.72	53.70
North County Metro		121.92	53.55	(68.37)
North County Metro	Hidden Meadows	24.61	2.07	(22.54)
North County Metro	Twin Oaks	8.04	39.45	31.41
North Mountain	North Mountain	14.70	38.07	23.37
North Mountain	Palomar Mountain	1.67	1.53	(0.14)
Otay		22.94	111.20	88.26
Pala-Pauma	Pala-Pauma	18.85	36.72	17.87
Pendleton-De Luz		29.57	0.00	(29.57)
Rainbow		6.18	41.22	35.04
Ramona		103.24	336.63	233.39
San Dieguito		130.38	44.65	(85.73)
Spring Valley		95.23	200.78	105.55
Sweetwater		34.53	29.92	(4.61)
Valle De Oro		110.34	218.66	108.32
Valley Center		80.13	215.53	135.40
Total		**1,408.20**	**3,063.68**	**1,655.48**

[1]Includes Neighborhood Commercial, Service Commercial, and Rural Commercial designated lands, two-thirds of General Commercial lands, for the July 2004 Baseline General Plan Scenario, plus an assumed share of Specific Plan Areas per County staff estimates in 2002.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table A-13
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Neighborhood Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Neighborhood Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$39,629,691	90%	$35,666,722	$200	178,334	0.25	16.38	19.27
Barona		n/a	90%	n/a	200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	18,526,599	90%	16,673,939	200	83,370	0.25	7.66	9.01
Central Mountain		112,768	90%	101,492	200	507	0.16	0.07	0.09
Central Mountain	Cuyamaca	557,285	90%	501,557	200	2,508	0.16	0.36	0.42
Central Mountain	Descanso	1,822,649	90%	1,640,384	200	8,202	0.16	1.18	1.38
Central Mountain	Pine Valley	2,216,748	90%	1,995,073	200	9,975	0.16	1.43	1.68
County Islands		3,170,874	90%	2,853,787	200	14,269	0.25	1.31	1.54
Crest/Dehesa		11,506,285	90%	10,355,656	200	51,778	0.25	4.75	5.59
Desert		1,263,167	90%	1,136,850	200	5,684	0.16	0.82	0.96
Desert	Borrego Springs	13,345,233	90%	12,010,710	200	60,054	0.16	8.62	10.14
Fallbrook		57,223,812	90%	51,501,431	200	257,507	0.25	23.65	27.82
Jamul-Dulzura		22,943,470	90%	20,649,123	200	103,246	0.25	9.48	11.15
Julian		4,160,649	90%	3,744,584	200	18,723	0.16	2.69	3.16
Lakeside[6]		69,903,174	90%	62,912,857	200	314,564	0.25	28.89	33.98
Mountain Empire		162,916	90%	146,624	200	733	0.16	0.11	0.12
Mountain Empire	Boulevard	1,856,451	90%	1,670,806	200	8,354	0.16	1.20	1.41
Mountain Empire	Jacumba	2,490,309	90%	2,241,278	200	11,206	0.16	1.61	1.89
Mountain Empire	Lake Morena/Campo	3,197,251	90%	2,877,526	200	14,388	0.16	2.06	2.43
Mountain Empire	Potrero	1,354,922	90%	1,219,430	200	6,097	0.16	0.87	1.03
Mountain Empire	Tecate	294,136	90%	264,722	200	1,324	0.16	0.19	0.22
North County Metro		55,178,218	90%	49,660,396	200	248,302	0.25	22.80	26.82
North County Metro	Hidden Meadows	11,137,946	90%	10,024,151	200	50,121	0.25	4.60	5.41
North County Metro	Twin Oaks	3,636,477	90%	3,272,829	200	16,364	0.25	1.50	1.77
North Mountain	North Mountain	4,256,486	90%	3,830,838	200	19,154	0.16	2.75	3.23
North Mountain	Palomar Mountain	482,983	90%	434,685	200	2,173	0.16	0.31	0.37
Otay		6,645,256	90%	5,980,730	200	29,904	0.16	4.29	5.05
Pala-Pauma	Pala-Pauma	8,532,117	90%	7,678,905	200	38,395	0.25	3.53	4.15
Pendleton-De Luz		13,383,562	90%	12,045,206	200	60,226	0.25	5.53	6.51
Rainbow		2,796,939	90%	2,517,245	200	12,586	0.25	1.16	1.36
Ramona		46,723,885	90%	42,051,496	200	210,257	0.25	19.31	22.71
San Dieguito		59,007,098	90%	53,106,388	200	265,532	0.25	24.38	28.69
Spring Valley		43,100,538	90%	38,790,484	200	193,952	0.25	17.81	20.95
Sweetwater		15,625,647	90%	14,063,082	200	70,315	0.25	6.46	7.60
Valle De Oro		49,938,331	90%	44,944,498	200	224,722	0.25	20.64	24.28
Valley Center		36,263,475	90%	32,637,128	200	163,186	0.25	14.98	17.63
Total		**$612,447,348**	**--**	**$551,202,613**	**--**	**2,756,013**	**--**	**263.36**	**309.83**

[1]Estimated percentage of resident expenditures that will occur within CPA.

[2]Assumes an average rent of $1.33/sq.ft per month.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-14
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Community Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Community Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$55,644,904	90%	$50,080,413	$200	250,402	0.25	22.99	27.05
Barona		n/a	90%	n/a	200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	26,013,597	90%	23,412,237	200	117,061	0.25	10.75	12.65
Central Mountain		158,340	90%	142,506	200	713	0.16	0.10	0.12
Central Mountain	Cuyamaca	782,496	90%	704,246	200	3,521	0.16	0.51	0.59
Central Mountain	Descanso	2,559,221	90%	2,303,299	200	11,516	0.16	1.65	1.94
Central Mountain	Pine Valley	3,112,583	90%	2,801,325	200	14,007	0.16	2.01	2.36
County Islands		4,452,293	90%	4,007,064	200	20,035	0.25	1.84	2.16
Crest/Dehesa		16,156,222	90%	14,540,600	200	72,703	0.25	6.68	7.85
Desert		1,773,640	90%	1,596,276	200	7,981	0.16	1.15	1.35
Desert	Borrego Springs	18,738,330	90%	16,864,497	200	84,322	0.16	12.10	14.23
Fallbrook		80,349,188	90%	72,314,269	200	361,571	0.25	33.20	39.06
Jamul-Dulzura		32,215,421	90%	28,993,879	200	144,969	0.25	13.31	15.66
Julian		5,842,057	90%	5,257,852	200	26,289	0.16	3.77	4.44
Lakeside[6]		98,152,553	90%	88,337,298	200	441,686	0.25	40.56	47.72
Mountain Empire		228,753	90%	205,878	200	1,029	0.16	0.15	0.17
Mountain Empire	Boulevard	2,606,683	90%	2,346,015	200	11,730	0.16	1.68	1.98
Mountain Empire	Jacumba	3,496,697	90%	3,147,027	200	15,735	0.16	2.26	2.66
Mountain Empire	Lake Morena/Campo	4,489,328	90%	4,040,396	200	20,202	0.16	2.90	3.41
Mountain Empire	Potrero	1,902,476	90%	1,712,228	200	8,561	0.16	1.23	1.45
Mountain Empire	Tecate	413,002	90%	371,702	200	1,859	0.16	0.27	0.31
North County Metro		77,476,925	90%	69,729,232	200	348,646	0.25	32.02	37.67
North County Metro	Hidden Meadows	15,639,029	90%	14,075,126	200	70,376	0.25	6.46	7.60
North County Metro	Twin Oaks	5,106,055	90%	4,595,450	200	22,977	0.25	2.11	2.48
North Mountain	North Mountain	5,976,624	90%	5,378,962	200	26,895	0.16	3.86	4.54
North Mountain	Palomar Mountain	678,167	90%	610,350	200	3,052	0.16	0.44	0.52
Otay		9,330,747	90%	8,397,672	200	41,988	0.16	6.02	7.09
Pala-Pauma	Pala-Pauma	11,980,129	90%	10,782,116	200	53,911	0.25	4.95	5.82
Pendleton-De Luz		18,792,148	90%	16,912,933	200	84,565	0.25	7.77	9.14
Rainbow		3,927,243	90%	3,534,518	200	17,673	0.25	1.62	1.91
Ramona		65,606,013	90%	59,045,412	200	295,227	0.25	27.11	31.89
San Dieguito		82,853,138	90%	74,567,824	200	372,839	0.25	34.24	40.28
Spring Valley		60,518,394	90%	54,466,555	200	272,333	0.25	25.01	29.42
Sweetwater		21,940,307	90%	19,746,276	200	98,731	0.25	9.07	10.67
Valle De Oro		70,119,486	90%	63,107,538	200	315,538	0.25	28.97	34.09
Valley Center		50,918,327	90%	45,826,494	200	229,132	0.25	21.04	24.75
Total		**$859,950,519**	--	**$773,955,467**	--	**3,869,777**	--	**369.78**	**435.04**

[1]Estimated percentage of resident expenditures that will occur within CPA.
[2]Assumes an average rent of $1.33/sq.ft per month.
[3]Estimated buying power divided by average sales per square foot.
[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).
[5]Net acreage equal to 85% of gross acreage.
[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-15
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Regional and Super Regional Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Regional & Super-Regional Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$78,926,202	0%	$0	$309	-	0.25	-	-
Barona		n/a	0%	n/a	309	n/a	0.25	n/a	n/a
Bonsall	Bonsall	$36,897,438	0%	0	309	-	0.25	-	-
Central Mountain		$224,589	0%	0	309	-	0.16	-	-
Central Mountain	Cuyamaca	$1,109,885	0%	0	309	-	0.16	-	-
Central Mountain	Descanso	$3,629,974	0%	0	309	-	0.16	-	-
Central Mountain	Pine Valley	$4,414,859	0%	0	309	-	0.16	-	-
County Islands		$6,315,090	0%	0	309	-	0.25	-	-
Crest/Dehesa		$22,915,832	0%	0	309	-	0.25	-	-
Desert		$2,515,714	0%	0	309	-	0.16	-	-
Desert	Borrego Springs	$26,578,269	0%	0	309	-	0.16	-	-
Fallbrook		$113,966,523	0%	0	309	-	0.25	-	-
Jamul-Dulzura		$45,694,046	0%	0	309	-	0.25	-	-
Julian		$8,286,319	0%	0	309	-	0.16	-	-
Lakeside[6]		$139,218,648	0%	0	309	-	0.25	-	-
Mountain Empire		$324,462	0%	0	309	-	0.16	-	-
Mountain Empire	Boulevard	$3,697,294	0%	0	309	-	0.16	-	-
Mountain Empire	Jacumba	$4,959,682	0%	0	309	-	0.16	-	-
Mountain Empire	Lake Morena/Campo	$6,367,621	0%	0	309	-	0.16	-	-
Mountain Empire	Potrero	$2,698,454	0%	0	309	-	0.16	-	-
Mountain Empire	Tecate	$585,799	0%	0	309	-	0.16	-	-
North County Metro		$109,892,533	0%	0	309	-	0.25	-	-
North County Metro	Hidden Meadows	$22,182,251	0%	0	309	-	0.25	-	-
North County Metro	Twin Oaks	$7,242,381	0%	0	309	-	0.25	-	-
North Mountain	North Mountain	$8,477,187	0%	0	309	-	0.16	-	-
North Mountain	Palomar Mountain	$961,905	0%	0	309	-	0.16	-	-
Otay		$13,234,642	0%	0	309	-	0.16	-	-
Pala-Pauma	Pala-Pauma	$16,992,501	0%	0	309	-	0.25	-	-
Pendleton-De Luz		$26,654,604	0%	0	309	-	0.25	-	-
Rainbow		$5,570,364	0%	0	309	-	0.25	-	-
Ramona		$93,054,945	0%	0	309	-	0.25	-	-
San Dieguito		$117,518,103	0%	0	309	-	0.25	-	-
Spring Valley		$85,838,715	0%	0	309	-	0.25	-	-
Sweetwater		$31,119,923	0%	0	309	-	0.25	-	-
Valle De Oro		$99,456,813	0%	0	309	-	0.25	-	-
Valley Center		$72,222,071	0%	0	309	-	0.25	-	-
Total		**$1,219,745,635**	**--**	**$0**	**--**	**-**	**--**	**-**	**-**

[1]Estimated percentage of resident expenditures likely to occur within CPA.

[2]Based on ERA knowledge of local retail market, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-16
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Square Feet of Retail Space Outside of Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Non-Center ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$124,550,235	90%	$112,095,211	$200	560,476	0.25	51.47	60.55
Barona		n/a	90%	n/a	$200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	58,226,349	90%	52,403,714	$200	262,019	0.25	24.06	28.31
Central Mountain		354,414	90%	318,973	$200	1,595	0.16	0.23	0.27
Central Mountain	Cuyamaca	1,751,464	90%	1,576,318	$200	7,882	0.16	1.13	1.33
Central Mountain	Descanso	5,728,315	90%	5,155,484	$200	25,777	0.16	3.70	4.35
Central Mountain	Pine Valley	6,966,909	90%	6,270,218	$200	31,351	0.16	4.50	5.29
County Islands		9,965,587	90%	8,969,028	$200	44,845	0.25	4.12	4.84
Crest/Dehesa		36,162,545	90%	32,546,290	$200	162,731	0.25	14.94	17.58
Desert		3,969,947	90%	3,572,952	$200	17,865	0.16	2.56	3.02
Desert	Borrego Springs	41,942,087	90%	37,747,878	$200	188,739	0.16	27.08	31.86
Fallbrook		179,845,944	90%	161,861,349	$200	809,307	0.25	74.32	87.43
Jamul-Dulzura		72,107,920	90%	64,897,128	$200	324,486	0.25	29.80	35.05
Julian		13,076,303	90%	11,768,673	$200	58,843	0.16	8.44	9.93
Lakeside[6]		219.695.296	90%	197.725.767	$200	988.629	0.25	90.78	106.80
Mountain Empire		512,020	90%	460,818	$200	2,304	0.16	0.33	0.39
Mountain Empire	Boulevard	5,834,550	90%	5,251,095	$200	26,255	0.16	3.77	4.43
Mountain Empire	Jacumba	7,826,672	90%	7,044,005	$200	35,220	0.16	5.05	5.95
Mountain Empire	Lake Morena/Campo	10,048,484	90%	9,043,635	$200	45,218	0.16	6.49	7.63
Mountain Empire	Potrero	4,258,320	90%	3,832,488	$200	19,162	0.16	2.75	3.23
Mountain Empire	Tecate	924,425	90%	831,983	$200	4,160	0.16	0.60	0.70
North County Metro		173,416,945	90%	156,075,251	$200	780,376	0.25	71.66	84.31
North County Metro	Hidden Meadows	35,004,909	90%	31,504,418	$200	157,522	0.25	14.46	17.02
North County Metro	Twin Oaks	11,428,907	90%	10,286,016	$200	51,430	0.25	4.72	5.56
North Mountain	North Mountain	13,377,505	90%	12,039,754	$200	60,199	0.16	8.64	10.16
North Mountain	Palomar Mountain	1,517,944	90%	1,366,149	$200	6,831	0.16	0.98	1.15
Otay		20,885,052	90%	18,796,547	$200	93,983	0.16	13.48	15.86
Pala-Pauma	Pala-Pauma	26,815,176	90%	24,133,659	$200	120,668	0.25	11.08	13.04
Pendleton-De Luz		42,062,548	90%	37,856,293	$200	189,281	0.25	17.38	20.45
Rainbow		8,790,365	90%	7,911,328	$200	39,557	0.25	3.63	4.27
Ramona		146,846,231	90%	132,161,608	$200	660,808	0.25	60.68	71.39
San Dieguito		185,450,547	90%	166,905,492	$200	834,527	0.25	76.63	90.16
Spring Valley		135,458,591	90%	121,912,732	$200	609,564	0.25	55.97	65.85
Sweetwater		49,109,087	90%	44,198,178	$200	220,991	0.25	20.29	23.87
Valle De Oro		156,948,758	90%	141,253,883	$200	706,269	0.25	64.85	76.30
Valley Center		113,970,718	90%	102,573,646	$200	512,868	0.25	47.10	55.41
Total		**$1,924,831,069**	**--**	**$1,732,347,962**	**--**	**8,661,740**	**--**	**827.69**	**973.75**

[1]Estimated percentage of resident expenditures likely to occur within CPA.

[2]Assumes an average rent of $1.33/sq.ft per month.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-17
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Total Supportable Retail Acres for Neighborhood, Community & Non-Center Outlets

Community Planning Area (CPA)	Subarea Group	Estimated Net Acreage[1]	Estimated Gross Acreage[2]
Alpine		90.84	106.87
Barona		n/a	n/a
Bonsall	Bonsall	42.47	49.96
Central Mountain		0.40	0.48
Central Mountain	Cuyamaca	2.00	2.35
Central Mountain	Descanso	6.53	7.68
Central Mountain	Pine Valley	7.94	9.34
County Islands		7.27	8.55
Crest/Dehesa		26.37	31.03
Desert		4.52	5.32
Desert	Borrego Springs	47.80	56.23
Fallbrook		131.16	154.31
Jamul-Dulzura		52.59	61.87
Julian		14.90	17.53
Lakeside[3]		160.23	188.50
Mountain Empire		0.58	0.69
Mountain Empire	Boulevard	6.65	7.82
Mountain Empire	Jacumba	8.92	10.49
Mountain Empire	Lake Morena/Campo	11.45	13.47
Mountain Empire	Potrero	4.85	5.71
Mountain Empire	Tecate	1.05	1.24
North County Metro		126.48	148.80
North County Metro	Hidden Meadows	25.53	30.03
North County Metro	Twin Oaks	8.34	9.81
North Mountain	North Mountain	15.24	17.93
North Mountain	Palomar Mountain	1.73	2.04
Otay		23.80	28.00
Pala-Pauma	Pala-Pauma	19.56	23.01
Pendleton-De Luz		30.68	36.09
Rainbow		6.41	7.54
Ramona		107.10	126.00
San Dieguito		135.25	159.12
Spring Valley		98.79	116.23
Sweetwater		35.82	42.14
Valle De Oro		114.47	134.67
Valley Center		83.12	97.79
Total		**1,460.83**	**1,718.62**

[1]Based on an estimated Floor Area Ratio (FAR) of 0.25
[2]Net acreage equal to 85% of gross acreage.
[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table A-18
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Retail Land Comparison: Current Developed Retail Acres & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current Developed Retail Acres with Estimated Future Supportable Acres[1]	
			Current Developed Retail Acres	Surplus/(Deficit)
Alpine		106.87	83.04	(23.83)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	49.96	28.31	(21.65)
Central Mountain		0.48	0.00	(0.48)
Central Mountain	Cuyamaca	2.35	1.48	(0.87)
Central Mountain	Descanso	7.68	4.85	(2.83)
Central Mountain	Pine Valley	9.34	16.81	7.47
County Islands		8.55	1.16	(7.39)
Crest/Dehesa		31.03	5.61	(25.42)
Desert		5.32	0.00	(5.32)
Desert	Borrego Springs	56.23	64.37	8.14
Fallbrook		154.31	110.58	(43.73)
Jamul-Dulzura		61.87	22.14	(39.73)
Julian		17.53	30.67	13.14
Lakeside[3]		188.50	212.43	23.93
Mountain Empire		0.69	0.00	(0.69)
Mountain Empire	Boulevard	7.82	30.41	22.59
Mountain Empire	Jacumba	10.49	12.67	2.18
Mountain Empire	Lake Morena/Campo	13.47	16.44	2.97
Mountain Empire	Potrero	5.71	1.27	(4.44)
Mountain Empire	Tecate	1.24	3.65	2.41
North County Metro		148.80	21.94	(126.86)
North County Metro	Hidden Meadows	30.03	1.28	(28.75)
North County Metro	Twin Oaks	9.81	1.06	(8.75)
North Mountain	North Mountain	17.93	21.64	3.71
North Mountain	Palomar Mountain	2.04	3.45	1.41
Otay		28.00	0.00	(28.00)
Pala-Pauma	Pala-Pauma	23.01	5.67	(17.34)
Pendleton-De Luz		36.09	69.68	33.59
Rainbow		7.54	6.82	(0.72)
Ramona		126.00	129.69	3.69
San Dieguito		159.12	28.33	(130.79)
Spring Valley		116.23	129.67	13.44
Sweetwater		42.14	10.19	(31.95)
Valle De Oro		134.67	169.88	35.21
Valley Center		97.79	27.41	(70.38)
Total		**1,718.62**	**1,272.60**	**(446.02)**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table A-19
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.

Retail Land Comparison: Retail Land Allowed Under Current General Plan & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current General Plan with Estimated Future Supportable Acres[1]	
			Estimated Gross Acreage Allowed under Current GP	Surplus/(Deficit)
Alpine		106.87	110.18	3.31
Barona		n/a	n/a	n/a
Bonsall	Bonsall	49.96	125.72	75.76
Central Mountain		0.48	0.00	(0.48)
Central Mountain	Cuyamaca	2.35	0.00	(2.35)
Central Mountain	Descanso	7.68	5.46	(2.22)
Central Mountain	Pine Valley	9.34	17.10	7.76
County Islands		8.55	1.10	(7.45)
Crest/Dehesa		31.03	13.68	(17.35)
Desert		5.32	0.00	(5.32)
Desert	Borrego Springs	56.23	333.51	277.28
Fallbrook		154.31	236.51	82.20
Jamul-Dulzura		61.87	87.38	25.51
Julian		17.53	75.03	57.50
Lakeside[3]		188.50	380.77	192.27
Mountain Empire		0.69	28.50	27.81
Mountain Empire	Boulevard	7.82	121.18	113.36
Mountain Empire	Jacumba	10.49	18.20	7.71
Mountain Empire	Lake Morena/Campo	13.47	48.20	34.73
Mountain Empire	Potrero	5.71	14.94	9.23
Mountain Empire	Tecate	1.24	40.23	38.99
North County Metro		148.80	36.90	(111.90)
North County Metro	Hidden Meadows	30.03	39.30	9.27
North County Metro	Twin Oaks	9.81	22.60	12.79
North Mountain	North Mountain	17.93	13.01	(4.92)
North Mountain	Palomar Mountain	2.04	0.00	(2.04)
Otay		28.00	111.20	83.20
Pala-Pauma	Pala-Pauma	23.01	37.08	14.07
Pendleton-De Luz		36.09	0.00	(36.09)
Rainbow		7.54	31.95	24.41
Ramona		126.00	274.25	148.25
San Dieguito		159.12	45.05	(114.07)
Spring Valley		116.23	205.37	89.14
Sweetwater		42.14	29.92	(12.22)
Valle De Oro		134.67	219.73	85.06
Valley Center		97.79	100.21	2.42
Total		**1,718.6**	**2,824.26**	**1,105.64**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table A-20
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.

Retail Land Comparison: Retail Land Allowed Under Proposed General Plan & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Proposed General Plan with Estimated Future Supportable Acres[1]	
			Estimated Gross Acreage Allowed under Proposed GP	Surplus/(Deficit)
Alpine		106.87	134.46	27.59
Barona		n/a	0.00	n/a
Bonsall	Bonsall	49.96	127.77	77.81
Central Mountain		0.48	0.00	(0.48)
Central Mountain	Cuyamaca	2.35	1.98	(0.37)
Central Mountain	Descanso	7.68	6.63	(1.05)
Central Mountain	Pine Valley	9.34	19.09	9.75
County Islands		8.55	0.00	(8.55)
Crest/Dehesa		31.03	17.01	(14.02)
Desert		5.32	18.79	13.47
Desert	Borrego Springs	56.23	281.51	225.28
Fallbrook		154.31	240.18	85.87
Jamul-Dulzura		61.87	88.28	26.41
Julian		17.53	71.65	54.12
Lakeside[3]		188.50	380.77	192.27
Mountain Empire		0.69	28.50	27.81
Mountain Empire	Boulevard	7.82	122.17	114.35
Mountain Empire	Jacumba	10.49	24.50	14.01
Mountain Empire	Lake Morena/Campo	13.47	51.39	37.92
Mountain Empire	Potrero	5.71	24.30	18.59
Mountain Empire	Tecate	1.24	54.72	53.48
North County Metro		148.80	53.55	(95.25)
North County Metro	Hidden Meadows	30.03	2.07	(27.96)
North County Metro	Twin Oaks	9.81	39.45	29.64
North Mountain	North Mountain	17.93	38.07	20.14
North Mountain	Palomar Mountain	2.04	1.53	(0.51)
Otay		28.00	111.20	83.20
Pala-Pauma	Pala-Pauma	23.01	36.72	13.71
Pendleton-De Luz		36.09	0.00	(36.09)
Rainbow		7.54	41.22	33.68
Ramona		126.00	336.63	210.63
San Dieguito		159.12	44.65	(114.47)
Spring Valley		116.23	200.78	84.55
Sweetwater		42.14	29.92	(12.22)
Valle De Oro		134.67	218.66	83.99
Valley Center		97.79	215.53	117.74
Total		**1,718.6**	**3,063.68**	**1,345.06**

[1]Includes Neighborhood Commercial, Service Commercial, and Rural Commercial designated lands, two-thirds of General Commercial lands, for the July 2004 Baseline General Plan Scenario, plus an assumed share of Specific Plan Areas per County staff estimates in 2002.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-1

Total Estimated Sales in Retail Outlets to San Diego Residents
('000 of 2001 $)

	'000 of 2001 Dollars
Estimated Selected Retail Expenditures[1]	$27,066,361
Less: Estimated Tourism Related Spending[2]	$335,288
Less: Estimated Expenditures by Mexican Residents[3]	$1,467
Estimated Selected Resident Expenditures[4]	$26,729,606
Total San Diego County Households (2000)[5]	994,677
Estimated Selected Resident Expenditures Per Household	$26,873

[1]Based on taxable retail sales in retail outlets San Diego County in 2000 (adjusted for inflation to 2001 dollars) plus non-taxable transactions at drug stores and food stores; Excludes new and used auto sales, and boat, motorcycle and plane dealers.

[2]Based on the distribution of expenditures presented in the San Diego County Visitor Profile (2000).

[3]An ERA estimate based on data from the 1994 San Diego Dialogue Study "Who Crosses the Border" (presented in 2001 dollars.).

[4]Total retail expenditures minus tourism and Mexican national-related expenditures.

[5]U.S. Census Bureau, 2000 Census.

Source: Economics Research Associates, State Board of Equalization and the U.S. Census Bureau.

Table B-2
Estimated Retail Sales Occurring In Shopping Centers and Outside of Shopping Centers

Estimated Retail Sales in Centers by Type (2001)

	Neighborhood	Community	Regional & Super Regional	Total
GLA of Centers by Type[1]	14,626,771	20,996,191	23,141,056	58,764,018
Average Sales Per Square Foot[2]	$245	$240	$309	$269
Estimated Total Sales	$3,590,385,970	$5,041,338,311	$7,150,586,304	$15,782,310,585
% of Total Sales by Center Type	23%	32%	45%	100%

Estimated Retail Sales Occurring Outside Centers

Estimated Retail Sales in San Diego County, 2001[3]	$27,066,360,540
Estimated Retail Sales In Centers	$15,782,310,585
Retail Sales Occurring Outside of Centers	$11,284,049,955
% of Retail Sales Occurring Outside of Centers	42%

Distribution of Total Estimated Retail Sales

Type of Outlet	% of Sales
Non-Center	42%
Neighborhood	13%
Community	19%
Regional & Super Regional	26%

[1]The Shopping Center Directory (Interactive Market Systems, Inc.). Includes only those centers reporting size.

[2]Community sales per sq.ft. as reported by ULI Dollars & Cents, 2000 (reported in 2001 $). Neighborhood sales per sq.ft. is 80% of ULI figure. Regional & Superregional figure is an ERA estimate based on local data sources and estimates.

[3]Total estimated sales in retail outlets only, less tourism expenditures and expenditures by non-resident Mexican nationals; excludes auto, boat, motorcycle and aircraft sales (see Table 1). Presented in 2001 $.

Source: The Shopping Center Directory, ULI Dollars & Cents (2000), California State Board of Equalization and Economics Research Associates

Table B-3

Buying Power by CPA[1]

Community Planning Area (CPA)	Sponsor Group	Estimated Build-out Total Population[1]	Estimated Build-out Group Quarters Population[1]	Estimated Build-out Household Population[1]	Estimated Build-out Household Size1	Estimated Build-out Households[1]	2030 Median Income ($2001)[2]	Estimated 2030 Mean Income ($2001)[3]	Estimated % of Income Spent on Retail Items[4]	Estimated Annual Expenditures Per Household ($2001)	Estimated CPA Resident Buying Power ($2001)
Alpine		28,632	498	28,134	2.908	9,675	$89,389	$136,765	22%	$30,088	$291,094,463
Barona		537	2	535	3.636	147	n/a	n/a	n/a	n/a	n/a
Bonsall	Bonsall	15,196	65	15,131	2.907	5,205	79,047	127,265	22%	27,998	145,731,724
Central Mountain		203	0	203	2.875	71	70,780	57,332	29%	16,626	1,173,964
Central Mountain	Cuyamaca	615	0	615	2.426	254	70,780	57,332	29%	16,626	4,214,837
Central Mountain	Descanso	2,740	500	2,240	2.696	831	70,780	57,332	29%	16,626	13,814,164
Central Mountain	Pine Valley	2,760	0	2,760	2.746	1,005	70,780	57,332	29%	16,626	16,711,099
County Islands		3,140	1	3,139	3.476	903	93,999	120,319	22%	26,470	23,903,844
Crest/Dehesa		11,194	85	11,109	3.026	3,671	98,298	108,128	22%	23,788	87,330,477
Desert		1,777	71	1,706	2.369	720	47,494	76,465	22%	16,822	12,114,341
Desert	Borrego Springs	14,453	10	14,443	2.345	6,159	47,494	76,465	22%	16,822	103,609,698
Fallbrook		61,157	376	60,781	3.065	19,831	70,826	99,157	22%	21,814	432,595,405
Jamul-Dulzura		21,556	81	21,475	3.194	6,724	98,975	117,780	22%	25,912	174,218,312
Julian		4,314	47	4,267	2.575	1,657	63,584	94,740	22%	20,843	34,538,285
Lakeside[5]		87,871	741	87,130	2.983	29,209	68,920	82,015	22%	18,043	527,024,110
Mountain Empire		243	0	243	2.881	84	49,481	67,294	22%	14,805	1,248,705
Mountain Empire	Boulevard	2,841	179	2,662	2.816	945	49,481	67,294	22%	14,805	13,994,979
Mountain Empire	Jacumba	3,420	0	3,420	2.697	1,268	49,481	67,294	22%	14,805	18,773,360
Mountain Empire	Lake Morena/Campo	4,966	300	4,666	2.866	1,628	49,481	67,294	22%	14,805	24,102,683
Mountain Empire	Potrero	2,234	0	2,234	3.238	690	49,481	67,294	22%	14,805	10,214,172
Mountain Empire	Tecate	433	0	433	2.891	150	49,481	67,294	22%	14,805	2,217,362
North County Metro		66,827	550	66,277	3.146	21,067	81,787	92,419	22%	20,332	428,341,058
North County Metro	Hidden Meadows	11,383	77	11,306	2.716	4,163	81,787	92,419	22%	20,332	84,637,884
North County Metro	Twin Oaks	4,231	8	4,223	2.986	1,414	81,787	92,419	22%	20,332	28,755,231
North Mountain	North Mountain	6,986	152	6,834	2.571	2,658	47,814	55,464	29%	16,085	42,754,541
North Mountain	Palomar Mountain	689	0	689	2.306	299	47,814	55,464	29%	16,085	4,805,840
Otay		13,484	8,071	5,413	2.888	1,874	94,913	121,489	22%	26,728	50,095,697
Pala-Pauma	Pala-Pauma	14,420	132	14,288	3.521	4,058	64,123	82,077	22%	18,057	73,274,044
Pendleton-De Luz		38,341	16,175	22,166	3.556	6,233	50,282	55,813	29%	16,186	100,892,862
Rainbow		3,532	8	3,524	2.896	1,217	65,959	60,022	29%	17,406	21,181,079
Ramona		53,843	266	53,577	3.221	16,634	80,866	97,040	22%	21,349	355,107,621
San Dieguito		32,977	8	32,969	2.850	11,568	138,193	178,269	22%	39,219	453,691,061
Spring Valley		66,862	388	66,474	3.232	20,567	65,279	71,807	22%	15,798	324,916,238
Sweetwater		15,276	155	15,121	3.155	4,793	94,676	111,718	22%	24,578	117,794,963
Valle De Oro		42,851	225	42,626	2.948	14,459	92,458	118,346	22%	26,036	376,463,388
Valley Center		42,063	99	41,964	3.082	13,616	74,601	93,997	22%	20,679	281,567,173
Community Planning Areas Total		**684,047**	**29,270**	**654,777**	**--**	**215,446**	--		--	--	**$4,682,904,662**

[1]Under Proposed General Plan population and size assumptions for the July 2004 Baseline scenario provided by the County.
[2]Based on SANDAG 2030 Cities/County Forecast (presented in $ 2001).
[3]ERA estimate based on current relationship between median and mean incomes (as reported by SANDAG and Census data).
[4]Based on ratios of expenditures to income reported in "Consumer Expenditures in 2000", Bureau of Labor Statistics.
[5]Pepper Drive/Bostonia CPA merged into Lakeside CPA
[6]Including incorporated areas.

Sources: Technology Associates International Corporation, State of California Board of Equalization, and Economics Research Associates.

Table B-4
Resident Buying Power by Type of Center

Community Planning Area (CPA)	Subarea Group	Estimated CPA Resident Buying Power ($2001)	Estimated Buying Power by Type of Center ($2001)[1]			
			13%	19%	26%	42%
			Neighborhood	Community	Regional & Super Regional	Non-Center
Alpine		$291,094,463	$38,614,038	$54,218,803	$76,903,434	$121,358,188
Barona		n/a	n/a	n/a	n/a	n/a
Bonsall	Bonsall	145,731,724	19,331,492	27,143,765	38,500,458	60,756,009
Central Mountain		1,173,964	155,728	218,661	310,146	489,429
Central Mountain	Cuyamaca	4,214,837	559,103	785,049	1,113,506	1,757,179
Central Mountain	Descanso	13,814,164	1,832,466	2,573,005	3,649,525	5,759,168
Central Mountain	Pine Valley	16,711,099	2,216,748	3,112,583	4,414,859	6,966,909
County Islands		23,903,844	3,170,874	4,452,293	6,315,090	9,965,587
Crest/Dehesa		87,330,477	11,584,495	16,266,039	23,071,595	36,408,348
Desert		12,114,341	1,606,982	2,256,398	3,200,454	5,050,507
Desert	Borrego Springs	103,609,698	13,743,954	19,298,182	27,372,357	43,195,206
Fallbrook		432,595,405	57,384,312	80,574,549	114,286,173	180,350,371
Jamul-Dulzura		174,218,312	23,110,273	32,449,632	46,026,250	72,632,156
Julian		34,538,285	4,581,546	6,433,047	9,124,573	14,399,119
Lakeside[2]		527,024,110	69,910,396	98,162,693	139,233,030	219,717,992
Mountain Empire		1,248,705	165,642	232,582	329,892	520,589
Mountain Empire	Boulevard	13,994,979	1,856,451	2,606,683	3,697,294	5,834,550
Mountain Empire	Jacumba	18,773,360	2,490,309	3,496,697	4,959,682	7,826,672
Mountain Empire	Lake Morena/Campo	24,102,683	3,197,251	4,489,328	6,367,621	10,048,484
Mountain Empire	Potrero	10,214,172	1,354,922	1,902,476	2,698,454	4,258,320
Mountain Empire	Tecate	2,217,362	294,136	413,002	585,799	924,425
North County Metro		428,341,058	56,819,967	79,782,141	113,162,229	178,576,720
North County Metro	Hidden Meadows	84,637,884	11,227,319	15,764,521	22,360,246	35,285,797
North County Metro	Twin Oaks	28,755,231	3,814,417	5,355,905	7,596,764	11,988,145
North Mountain	North Mountain	42,754,541	5,671,442	7,963,394	11,295,203	17,824,501
North Mountain	Palomar Mountain	4,805,840	637,501	895,128	1,269,641	2,003,569
Otay		50,095,697	6,645,256	9,330,747	13,234,642	20,885,052
Pala-Pauma	Pala-Pauma	73,274,044	9,719,892	13,647,910	19,358,065	30,548,177
Pendleton-De Luz		100,892,862	13,383,562	18,792,148	26,654,604	42,062,548
Rainbow		21,181,079	2,809,696	3,945,155	5,595,770	8,830,458
Ramona		355,107,621	47,105,462	66,141,794	93,814,892	148,045,472
San Dieguito		453,691,061	60,182,676	84,503,793	119,859,376	189,145,215
Spring Valley		324,916,238	43,100,538	60,518,394	85,838,715	135,458,591
Sweetwater		117,794,963	15,625,647	21,940,307	31,119,923	49,109,087
Valle De Oro		376,463,388	49,938,331	70,119,486	99,456,813	156,948,758
Valley Center		281,567,173	37,350,231	52,444,265	74,386,446	117,386,231
Total		$4,682,904,662	$621,193,055	$872,230,555	$1,237,163,522	$1,952,317,530

[1]Based on distribution established in Table 2.
[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA.

Sources: Technology Associates International Corporation, California State Board of Equalization, and Economics Research Associates.

Table B-5
Resident Supported Gross Acres of Retail Space in Neighborhood Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Neighborhood Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$38,614,038	90%	$34,752,634	$245	141,578	0.25	13.00	15.29
Barona		n/a	90%	n/a	245	n/a	0.25	n/a	n/a
Bonsall	Bonsall	19,331,492	90%	17,398,343	245	70,879	0.25	6.51	7.66
Central Mountain		155,728	90%	140,155	245	571	0.16	0.08	0.10
Central Mountain	Cuyamaca	559,103	90%	503,193	245	2,050	0.16	0.29	0.35
Central Mountain	Descanso	1,832,466	90%	1,649,219	245	6,719	0.16	0.96	1.13
Central Mountain	Pine Valley	2,216,748	90%	1,995,073	245	8,128	0.16	1.17	1.37
County Islands		3,170,874	90%	2,853,787	245	11,626	0.25	1.07	1.26
Crest/Dehesa		11,584,495	90%	10,426,045	245	42,474	0.25	3.90	4.59
Desert		1,606,982	90%	1,446,284	245	5,892	0.16	0.85	0.99
Desert	Borrego Springs	13,743,954	90%	12,369,558	245	50,392	0.16	7.23	8.51
Fallbrook		57,384,312	90%	51,645,881	245	210,399	0.25	19.32	22.73
Jamul-Dulzura		23,110,273	90%	20,799,246	245	84,733	0.25	7.78	9.15
Julian		4,581,546	90%	4,123,391	245	16,798	0.16	2.41	2.84
Lakeside[6]		69,910,396	90%	62,919,356	245	256,325	0.25	23.54	27.69
Mountain Empire		165,642	90%	149,078	245	607	0.16	0.09	0.10
Mountain Empire	Boulevard	1,856,451	90%	1,670,806	245	6,807	0.16	0.98	1.15
Mountain Empire	Jacumba	2,490,309	90%	2,241,278	245	9,131	0.16	1.31	1.54
Mountain Empire	Lake Morena/Campo	3,197,251	90%	2,877,526	245	11,723	0.16	1.68	1.98
Mountain Empire	Potrero	1,354,922	90%	1,219,430	245	4,968	0.16	0.71	0.84
Mountain Empire	Tecate	294,136	90%	264,722	245	1,078	0.16	0.15	0.18
North County Metro		56,819,967	90%	51,137,971	245	208,330	0.25	19.13	22.51
North County Metro	Hidden Meadows	11,227,319	90%	10,104,587	245	41,165	0.25	3.78	4.45
North County Metro	Twin Oaks	3,814,417	90%	3,432,975	245	13,985	0.25	1.28	1.51
North Mountain	North Mountain	5,671,442	90%	5,104,298	245	20,794	0.16	2.98	3.51
North Mountain	Palomar Mountain	637,501	90%	573,750	245	2,337	0.16	0.34	0.39
Otay		6,645,256	90%	5,980,730	245	24,365	0.16	3.50	4.11
Pala-Pauma	Pala-Pauma	9,719,892	90%	8,747,903	245	35,638	0.25	3.27	3.85
Pendleton-De Luz		13,383,562	90%	12,045,206	245	49,071	0.25	4.51	5.30
Rainbow		2,809,696	90%	2,528,727	245	10,302	0.25	0.95	1.11
Ramona		47,105,462	90%	42,394,916	245	172,711	0.25	15.86	18.66
San Dieguito		60,182,676	90%	54,164,409	245	220,659	0.25	20.26	23.84
Spring Valley		43,100,538	90%	38,790,484	245	158,027	0.25	14.51	17.07
Sweetwater		15,625,647	90%	14,063,082	245	57,291	0.25	5.26	6.19
Valle De Oro		49,938,331	90%	44,944,498	245	183,098	0.25	16.81	19.78
Valley Center		37,350,231	90%	33,615,208	245	136,944	0.25	12.58	14.79
Total		**$621,193,055**	**--**	**$559,073,750**	**--**	**2,277,595**	**--**	**218.05**	**256.53**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.

[2]80% of average sales per sq.ft. for neighborhood centers reported by ULI Dollars & Cents of Shopping Centers 2000 for the western United States, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-6
Resident Supported Gross Acres of Retail Space in Community Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Community Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$54,218,803	90%	$48,796,923	$240	203,230	0.25	18.66	21.96
Barona		n/a	90%	n/a	240	0	0.25	0	0
Bonsall	Bonsall	27,143,765	90%	24,429,388	240	101,744	0.25	9.34	10.99
Central Mountain		218,661	90%	196,795	240	820	0.16	0.12	0.14
Central Mountain	Cuyamaca	785,049	90%	706,544	240	2,943	0.16	0.42	0.50
Central Mountain	Descanso	2,573,005	90%	2,315,704	240	9,644	0.16	1.38	1.63
Central Mountain	Pine Valley	3,112,583	90%	2,801,325	240	11,667	0.16	1.67	1.97
County Islands		4,452,293	90%	4,007,064	240	16,689	0.25	1.53	1.80
Crest/Dehesa		16,266,039	90%	14,639,435	240	60,970	0.25	5.60	6.59
Desert		2,256,398	90%	2,030,759	240	8,458	0.16	1.21	1.43
Desert	Borrego Springs	19,298,182	90%	17,368,363	240	72,336	0.16	10.38	12.21
Fallbrook		80,574,549	90%	72,517,094	240	302,020	0.25	27.73	32.63
Jamul-Dulzura		32,449,632	90%	29,204,669	240	121,632	0.25	11.17	13.14
Julian		6,433,047	90%	5,789,743	240	24,113	0.16	3.46	4.07
Lakeside[6]		98,162,693	90%	88,346,424	240	367,946	0.25	33.79	39.75
Mountain Empire		232,582	90%	209,324	240	872	0.16	0.13	0.15
Mountain Empire	Boulevard	2,606,683	90%	2,346,015	240	9,771	0.16	1.40	1.65
Mountain Empire	Jacumba	3,496,697	90%	3,147,027	240	13,107	0.16	1.88	2.21
Mountain Empire	Lake Morena/Campo	4,489,328	90%	4,040,396	240	16,827	0.16	2.41	2.84
Mountain Empire	Potrero	1,902,476	90%	1,712,228	240	7,131	0.16	1.02	1.20
Mountain Empire	Tecate	413,002	90%	371,702	240	1,548	0.16	0.22	0.26
North County Metro		79,782,141	90%	71,803,927	240	299,049	0.25	27.46	32.31
North County Metro	Hidden Meadows	15,764,521	90%	14,188,069	240	59,091	0.25	5.43	6.38
North County Metro	Twin Oaks	5,355,905	90%	4,820,314	240	20,076	0.25	1.84	2.17
North Mountain	North Mountain	7,963,394	90%	7,167,055	240	29,849	0.16	4.28	5.04
North Mountain	Palomar Mountain	895,128	90%	805,615	240	3,355	0.16	0.48	0.57
Otay		9,330,747	90%	8,397,672	240	34,975	0.16	5.02	5.90
Pala-Pauma	Pala-Pauma	13,647,910	90%	12,283,119	240	51,157	0.25	4.70	5.53
Pendleton-De Luz		18,792,148	90%	16,912,933	240	70,439	0.25	6.47	7.61
Rainbow		3,945,155	90%	3,550,639	240	14,788	0.25	1.36	1.60
Ramona		66,141,794	90%	59,527,615	240	247,921	0.25	22.77	26.78
San Dieguito		84,503,793	90%	76,053,414	240	316,748	0.25	29.09	34.22
Spring Valley		60,518,394	90%	54,466,555	240	226,843	0.25	20.83	24.51
Sweetwater		21,940,307	90%	19,746,276	240	82,239	0.25	7.55	8.88
Valle De Oro		70,119,486	90%	63,107,538	240	262,831	0.25	24.14	28.39
Valley Center		52,444,265	90%	47,199,838	240	196,578	0.25	18.05	21.24
Total		**$872,230,555**	--	**$785,007,500**	--	**3,269,403**	--	**313.00**	**368.24**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.
[2]Based on ULI Dollars & Cents of Shopping Centers (2000) for the western United States, reported in 2001 dollars.
[3]Estimated buying power divided by average sales per square foot.
[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).
[5]Net acreage equal to 85% of gross acreage.
[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-7
Resident Supported Gross Acres of Retail Space in Regional and Super Regional Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Regional & Super-Regional Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$76,903,434	0%	$0	$309	-	0.25	-	-
Barona		n/a	0%	n/a	309	n/a	0.25	n/a	n/a
Bonsall	Bonsall	38,500,458	0%	0	309	-	0.25	-	-
Central Mountain		310,146	0%	0	309	-	0.16	-	-
Central Mountain	Cuyamaca	1,113,506	0%	0	309	-	0.16	-	-
Central Mountain	Descanso	3,649,525	0%	0	309	-	0.16	-	-
Central Mountain	Pine Valley	4,414,859	0%	0	309	-	0.16	-	-
County Islands		6,315,090	0%	0	309	-	0.25	-	-
Crest/Dehesa		23,071,595	0%	0	309	-	0.25	-	-
Desert		3,200,454	0%	0	309	-	0.16	-	-
Desert	Borrego Springs	27,372,357	0%	0	309	-	0.16	-	-
Fallbrook		114,286,173	0%	0	309	-	0.25	-	-
Jamul-Dulzura		46,026,250	0%	0	309	-	0.25	-	-
Julian		9,124,573	0%	0	309	-	0.16	-	-
Lakeside[6]		139,233,030	0%	0	309	-	0.25	-	-
Mountain Empire		329,892	0%	0	309	-	0.16	-	-
Mountain Empire	Boulevard	3,697,294	0%	0	309	-	0.16	-	-
Mountain Empire	Jacumba	4,959,682	0%	0	309	-	0.16	-	-
Mountain Empire	Lake Morena/Campo	6,367,621	0%	0	309	-	0.16	-	-
Mountain Empire	Potrero	2,698,454	0%	0	309	-	0.16	-	-
Mountain Empire	Tecate	585,799	0%	0	309	-	0.16	-	-
North County Metro		113,162,229	0%	0	309	-	0.25	-	-
North County Metro	Hidden Meadows	22,360,246	0%	0	309	-	0.25	-	-
North County Metro	Twin Oaks	7,596,764	0%	0	309	-	0.25	-	-
North Mountain	North Mountain	11,295,203	0%	0	309	-	0.16	-	-
North Mountain	Palomar Mountain	1,269,641	0%	0	309	-	0.16	-	-
Otay		13,234,642	0%	0	309	-	0.16	-	-
Pala-Pauma	Pala-Pauma	19,358,065	0%	0	309	-	0.25	-	-
Pendleton-De Luz		26,654,604	0%	0	309	-	0.25	-	-
Rainbow		5,595,770	0%	0	309	-	0.25	-	-
Ramona		93,814,892	0%	0	309	-	0.25	-	-
San Dieguito		119,859,376	0%	0	309	-	0.25	-	-
Spring Valley		85,838,715	0%	0	309	-	0.25	-	-
Sweetwater		31,119,923	0%	0	309	-	0.25	-	-
Valle De Oro		99,456,813	0%	0	309	-	0.25	-	-
Valley Center		74,386,446	0%	0	309	-	0.25	-	-
Total		**$1,237,163,522**	**--**	**$0**	**--**	**-**	**--**	**-**	**-**

[1]Assumed percentage of resident expenditures that will occur within CPA.

[2]Based on ERA knowledge of local retail market, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-8
Supportable Square Feet of Retail Space Outside of Centers

Community Planning Area (CPA)	Subarea Group	Estimated Buying Power: Non-Center ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$121,358,188	90%	$109,222,369	$245	444,958	0.25	40.86	48.07
Barona		n/a	90%	n/a	245	n/a	0.25	n/a	n/a
Bonsall	Bonsall	60,756,009	90%	54,680,408	245	222,761	0.25	20.46	24.07
Central Mountain		489,429	90%	440,486	245	1,794	0.16	0.26	0.30
Central Mountain	Cuyamaca	1,757,179	90%	1,581,461	245	6,443	0.16	0.92	1.09
Central Mountain	Descanso	5,759,168	90%	5,183,251	245	21,116	0.16	3.03	3.56
Central Mountain	Pine Valley	6,966,909	90%	6,270,218	245	25,544	0.16	3.67	4.31
County Islands		9,965,587	90%	8,969,028	245	36,539	0.25	3.36	3.95
Crest/Dehesa		36,408,348	90%	32,767,513	245	133,491	0.25	12.26	14.42
Desert		5,050,507	90%	4,545,456	245	18,518	0.16	2.66	3.13
Desert	Borrego Springs	43,195,206	90%	38,875,685	245	158,375	0.16	22.72	26.73
Fallbrook		180,350,371	90%	162,315,334	245	661,252	0.25	60.72	71.44
Jamul-Dulzura		72,632,156	90%	65,368,941	245	266,305	0.25	24.45	28.77
Julian		14,399,119	90%	12,959,207	245	52,794	0.16	7.57	8.91
Lakeside[6]		219,717,992	90%	197,746,193	245	805,593	0.25	73.98	87.03
Mountain Empire		520,589	90%	468,530	245	1,909	0.16	0.27	0.32
Mountain Empire	Boulevard	5,834,550	90%	5,251,095	245	21,392	0.16	3.07	3.61
Mountain Empire	Jacumba	7,826,672	90%	7,044,005	245	28,696	0.16	4.12	4.84
Mountain Empire	Lake Morena/Campo	10,048,484	90%	9,043,635	245	36,843	0.16	5.29	6.22
Mountain Empire	Potrero	4,258,320	90%	3,832,488	245	15,613	0.16	2.24	2.64
Mountain Empire	Tecate	924,425	90%	831,983	245	3,389	0.16	0.49	0.57
North County Metro		178,576,720	90%	160,719,048	245	654,749	0.25	60.12	70.73
North County Metro	Hidden Meadows	35,285,797	90%	31,757,218	245	129,375	0.25	11.88	13.98
North County Metro	Twin Oaks	11,988,145	90%	10,789,331	245	43,954	0.25	4.04	4.75
North Mountain	North Mountain	17,824,501	90%	16,042,051	245	65,353	0.16	9.38	11.03
North Mountain	Palomar Mountain	2,003,569	90%	1,803,213	245	7,346	0.16	1.05	1.24
Otay		20,885,052	90%	18,796,547	245	76,575	0.16	10.99	12.93
Pala-Pauma	Pala-Pauma	30,548,177	90%	27,493,359	245	112,004	0.25	10.29	12.10
Pendleton-De Luz		42,062,548	90%	37,856,293	245	154,222	0.25	14.16	16.66
Rainbow		8,830,458	90%	7,947,412	245	32,377	0.25	2.97	3.50
Ramona		148,045,472	90%	133,240,925	245	542,806	0.25	49.84	58.64
San Dieguito		189,145,215	90%	170,230,694	245	693,498	0.25	63.68	74.92
Spring Valley		135,458,591	90%	121,912,732	245	496,657	0.25	45.61	53.65
Sweetwater		49,109,087	90%	44,198,178	245	180,058	0.25	16.53	19.45
Valle De Oro		156,948,758	90%	141,253,883	245	575,450	0.25	52.84	62.17
Valley Center		117,386,231	90%	105,647,608	245	430,395	0.25	39.52	46.50
Total		**$1,952,317,530**	**--**	**$1,757,085,777**	**--**	**7,158,142**	**--**	**685.29**	**806.23**

[1]Assumed percentage of resident expenditures that will occur within CPA if retail is made available.

[2]80% of average sales per sq.ft. for neighborhood centers reported by ULI Dollars & Cents of Shopping Centers 2000 for the western United States, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-9
Total Resident Supported Retail Acres for Neighborhood, Community & Non-Center Outlets

Community Planning Area (CPA)	Subarea Group	Estimated Net Acreage[1]	Estimated Gross Acreage[2]
Alpine		72.52	85.32
Barona		n/a	n/a
Bonsall	Bonsall	36.31	42.71
Central Mountain		0.46	0.54
Central Mountain	Cuyamaca	1.64	1.93
Central Mountain	Descanso	5.38	6.33
Central Mountain	Pine Valley	6.51	7.65
County Islands		5.96	7.01
Crest/Dehesa		21.76	25.60
Desert		4.72	5.55
Desert	Borrego Springs	40.33	47.45
Fallbrook		107.78	126.79
Jamul-Dulzura		43.40	51.06
Julian		13.44	15.82
Lakeside[3]		131.30	154.47
Mountain Empire		0.49	0.57
Mountain Empire	Boulevard	5.45	6.41
Mountain Empire	Jacumba	7.31	8.60
Mountain Empire	Lake Morena/Campo	9.38	11.04
Mountain Empire	Potrero	3.98	4.68
Mountain Empire	Tecate	0.86	1.02
North County Metro		106.72	125.55
North County Metro	Hidden Meadows	21.09	24.81
North County Metro	Twin Oaks	7.16	8.43
North Mountain	North Mountain	16.64	19.58
North Mountain	Palomar Mountain	1.87	2.20
Otay		19.50	22.94
Pala-Pauma	Pala-Pauma	18.26	21.48
Pendleton-De Luz		25.14	29.57
Rainbow		5.28	6.21
Ramona		88.47	104.08
San Dieguito		113.03	132.98
Spring Valley		80.95	95.23
Sweetwater		29.35	34.53
Valle De Oro		93.79	110.34
Valley Center		70.15	82.53
Total		**1,216.34**	**1,430.99**

[1]Based on an estimated Floor Area Ratio (FAR) of 0.25
[2]Net acreage equal to 85% of gross acreage.
[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-10

Comparison: Retail Land Developed As of 2002 & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Currently Developed Retail Acres with Estimated Resident Supported Acres at Build-out[1]	
			Currently Developed Retail Acres	Surplus/(Deficit)
Alpine		85.32	83.04	(2.28)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	42.71	28.31	(14.40)
Central Mountain		0.54	0.00	(0.54)
Central Mountain	Cuyamaca	1.93	1.48	(0.45)
Central Mountain	Descanso	6.33	4.85	(1.48)
Central Mountain	Pine Valley	7.65	16.81	9.16
County Islands		7.01	1.16	(5.85)
Crest/Dehesa		25.60	5.61	(19.99)
Desert		5.55	0.00	(5.55)
Desert	Borrego Springs	47.45	64.37	16.92
Fallbrook		126.79	110.58	(16.21)
Jamul-Dulzura		51.06	22.14	(28.92)
Julian		15.82	30.67	14.85
Lakeside[3]		154.47	212.43	57.96
Mountain Empire		0.57	0.00	(0.57)
Mountain Empire	Boulevard	6.41	30.41	24.00
Mountain Empire	Jacumba	8.60	12.67	4.07
Mountain Empire	Lake Morena/Campo	11.04	16.44	5.40
Mountain Empire	Potrero	4.68	1.27	(3.41)
Mountain Empire	Tecate	1.02	3.65	2.63
North County Metro		125.55	21.94	(103.61)
North County Metro	Hidden Meadows	24.81	1.28	(23.53)
North County Metro	Twin Oaks	8.43	1.06	(7.37)
North Mountain	North Mountain	19.58	21.64	2.06
North Mountain	Palomar Mountain	2.20	3.45	1.25
Otay		22.94	0.00	(22.94)
Pala-Pauma	Pala-Pauma	21.48	5.67	(15.81)
Pendleton-De Luz		29.57	69.68	40.11
Rainbow		6.21	6.82	0.61
Ramona		104.08	129.69	25.61
San Dieguito		132.98	28.33	(104.65)
Spring Valley		95.23	129.67	34.44
Sweetwater		34.53	10.19	(24.34)
Valle De Oro		110.34	169.88	59.54
Valley Center		82.53	27.41	(55.12)
Total		**1,430.99**	**1,272.60**	**(158.39)**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-11

Comparison: Retail Land Planned Under Existing General Plan & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current General Plan with Estimated Resident Supported Acres at Build-out[1]	
			Estimated Gross Acreage Allowed under Current GP	Surplus/(Deficit)
Alpine		85.32	110.18	24.86
Barona		n/a	n/a	n/a
Bonsall	Bonsall	42.71	125.72	83.01
Central Mountain		0.54	0.00	(0.54)
Central Mountain	Cuyamaca	1.93	0.00	(1.93)
Central Mountain	Descanso	6.33	5.46	(0.87)
Central Mountain	Pine Valley	7.65	17.10	9.45
County Islands		7.01	1.10	(5.91)
Crest/Dehesa		25.60	13.68	(11.92)
Desert		5.55	0.00	(5.55)
Desert	Borrego Springs	47.45	333.51	286.06
Fallbrook		126.79	236.51	109.72
Jamul-Dulzura		51.06	87.38	36.32
Julian		15.82	75.03	59.21
Lakeside[3]		154.47	380.77	226.30
Mountain Empire		0.57	28.50	27.93
Mountain Empire	Boulevard	6.41	121.18	114.77
Mountain Empire	Jacumba	8.60	18.20	9.60
Mountain Empire	Lake Morena/Campo	11.04	48.20	37.16
Mountain Empire	Potrero	4.68	14.94	10.26
Mountain Empire	Tecate	1.02	40.23	39.21
North County Metro		125.55	36.90	(88.65)
North County Metro	Hidden Meadows	24.81	39.30	14.49
North County Metro	Twin Oaks	8.43	22.60	14.17
North Mountain	North Mountain	19.58	13.01	(6.57)
North Mountain	Palomar Mountain	2.20	0.00	(2.20)
Otay		22.94	111.20	88.26
Pala-Pauma	Pala-Pauma	21.48	37.08	15.60
Pendleton-De Luz		29.57	0.00	(29.57)
Rainbow		6.21	31.95	25.74
Ramona		104.08	274.25	170.17
San Dieguito		132.98	45.05	(87.93)
Spring Valley		95.23	205.37	110.14
Sweetwater		34.53	29.92	(4.61)
Valle De Oro		110.34	219.73	109.39
Valley Center		82.53	100.21	17.68
Total		**1,431.0**	**2,824.26**	**1,393.27**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-12

Comparison: Retail Land Planned Under Proposed General Plan & Estimated Resident Supported Retail Acres at Build-out

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Proposed General Plan with Estimated Resident Supported Acres at Build-out[1]	
			Estimated Gross Acreage Allowed under Proposed GP	Surplus/(Deficit)
Alpine		85.32	134.46	49.14
Barona		n/a	0.00	n/a
Bonsall	Bonsall	42.71	127.77	85.06
Central Mountain		0.54	0.00	(0.54)
Central Mountain	Cuyamaca	1.93	1.98	0.05
Central Mountain	Descanso	6.33	6.63	0.30
Central Mountain	Pine Valley	7.65	19.09	11.44
County Islands		7.01	0.00	(7.01)
Crest/Dehesa		25.60	17.01	(8.59)
Desert		5.55	18.79	13.24
Desert	Borrego Springs	47.45	281.51	234.06
Fallbrook		126.79	240.18	113.39
Jamul-Dulzura		51.06	88.28	37.22
Julian		15.82	71.65	55.83
Lakeside[3]		154.47	380.77	226.30
Mountain Empire		0.57	28.50	27.93
Mountain Empire	Boulevard	6.41	122.17	115.76
Mountain Empire	Jacumba	8.60	24.50	15.90
Mountain Empire	Lake Morena/Campo	11.04	51.39	40.35
Mountain Empire	Potrero	4.68	24.30	19.62
Mountain Empire	Tecate	1.02	54.72	53.70
North County Metro		125.55	53.55	(72.00)
North County Metro	Hidden Meadows	24.81	2.07	(22.74)
North County Metro	Twin Oaks	8.43	39.45	31.02
North Mountain	North Mountain	19.58	38.07	18.49
North Mountain	Palomar Mountain	2.20	1.53	(0.67)
Otay		22.94	111.20	88.26
Pala-Pauma	Pala-Pauma	21.48	36.36	14.88
Pendleton-De Luz		29.57	0.00	(29.57)
Rainbow		6.21	41.22	35.01
Ramona		104.08	336.63	232.55
San Dieguito		132.98	44.65	(88.33)
Spring Valley		95.23	200.78	105.55
Sweetwater		34.53	29.92	(4.61)
Valle De Oro		110.34	218.66	108.32
Valley Center		82.53	215.53	133.00
Total		**1,430.99**	**3,063.32**	**1,632.33**

[1]Includes Neighborhood Commercial, Service Commercial, and Rural Commercial designated lands, two-thirds of General Commercial lands, for the July 2004 Baseline General Plan Scenario, plus an assumed share of Specific Plan Areas per County staff estimates in 2002.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-13
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Neighborhood Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Neighborhood Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$38,614,038	90%	$34,752,634	$200	173,763	0.25	15.96	18.77
Barona		n/a	90%	n/a	200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	19,331,492	90%	17,398,343	200	86,992	0.25	7.99	9.40
Central Mountain		155,728	90%	140,155	200	701	0.16	0.10	0.12
Central Mountain	Cuyamaca	559,103	90%	503,193	200	2,516	0.16	0.36	0.42
Central Mountain	Descanso	1,832,466	90%	1,649,219	200	8,246	0.16	1.18	1.39
Central Mountain	Pine Valley	2,216,748	90%	1,995,073	200	9,975	0.16	1.43	1.68
County Islands		3,170,874	90%	2,853,787	200	14,269	0.25	1.31	1.54
Crest/Dehesa		11,584,495	90%	10,426,045	200	52,130	0.25	4.79	5.63
Desert		1,606,982	90%	1,446,284	200	7,231	0.16	1.04	1.22
Desert	Borrego Springs	13,743,954	90%	12,369,558	200	61,848	0.16	8.87	10.44
Fallbrook		57,384,312	90%	51,645,881	200	258,229	0.25	23.71	27.90
Jamul-Dulzura		23,110,273	90%	20,799,246	200	103,996	0.25	9.55	11.23
Julian		4,581,546	90%	4,123,391	200	20,617	0.16	2.96	3.48
Lakeside[6]		69,910,396	90%	62,919,356	200	314,597	0.25	28.89	33.99
Mountain Empire		165,642	90%	149,078	200	745	0.16	0.11	0.13
Mountain Empire	Boulevard	1,856,451	90%	1,670,806	200	8,354	0.16	1.20	1.41
Mountain Empire	Jacumba	2,490,309	90%	2,241,278	200	11,206	0.16	1.61	1.89
Mountain Empire	Lake Morena/Campo	3,197,251	90%	2,877,526	200	14,388	0.16	2.06	2.43
Mountain Empire	Potrero	1,354,922	90%	1,219,430	200	6,097	0.16	0.87	1.03
Mountain Empire	Tecate	294,136	90%	264,722	200	1,324	0.16	0.19	0.22
North County Metro		56,819,967	90%	51,137,971	200	255,690	0.25	23.48	27.62
North County Metro	Hidden Meadows	11,227,319	90%	10,104,587	200	50,523	0.25	4.64	5.46
North County Metro	Twin Oaks	3,814,417	90%	3,432,975	200	17,165	0.25	1.58	1.85
North Mountain	North Mountain	5,671,442	90%	5,104,298	200	25,521	0.16	3.66	4.31
North Mountain	Palomar Mountain	637,501	90%	573,750	200	2,869	0.16	0.41	0.48
Otay		6,645,256	90%	5,980,730	200	29,904	0.16	4.29	5.05
Pala-Pauma	Pala-Pauma	9,719,892	90%	8,747,903	200	43,740	0.25	4.02	4.73
Pendleton-De Luz		13,383,562	90%	12,045,206	200	60,226	0.25	5.53	6.51
Rainbow		2,809,696	90%	2,528,727	200	12,644	0.25	1.16	1.37
Ramona		47,105,462	90%	42,394,916	200	211,975	0.25	19.47	22.90
San Dieguito		60,182,676	90%	54,164,409	200	270,822	0.25	24.87	29.26
Spring Valley		43,100,538	90%	38,790,484	200	193,952	0.25	17.81	20.95
Sweetwater		15,625,647	90%	14,063,082	200	70,315	0.25	6.46	7.60
Valle De Oro		49,938,331	90%	44,944,498	200	224,722	0.25	20.64	24.28
Valley Center		37,350,231	90%	33,615,208	200	168,076	0.25	15.43	18.16
Total		**$621,193,055**	**--**	**$559,073,750**	**--**	**2,795,369**	**--**	**267.62**	**314.84**

[1]Estimated percentage of resident expenditures that will occur within CPA.

[2]Assumes an average rent of $1.33/sq.ft per month.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-14
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Community Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Community Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$54,218,803	90%	$48,796,923	$200	243,985	0.25	22.40	26.36
Barona		n/a	90%	n/a	200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	27,143,765	90%	24,429,388	200	122,147	0.25	11.22	13.20
Central Mountain		218,661	90%	196,795	200	984	0.16	0.14	0.17
Central Mountain	Cuyamaca	785,049	90%	706,544	200	3,533	0.16	0.51	0.60
Central Mountain	Descanso	2,573,005	90%	2,315,704	200	11,579	0.16	1.66	1.95
Central Mountain	Pine Valley	3,112,583	90%	2,801,325	200	14,007	0.16	2.01	2.36
County Islands		4,452,293	90%	4,007,064	200	20,035	0.25	1.84	2.16
Crest/Dehesa		16,266,039	90%	14,639,435	200	73,197	0.25	6.72	7.91
Desert		2,256,398	90%	2,030,759	200	10,154	0.16	1.46	1.71
Desert	Borrego Springs	19,298,182	90%	17,368,363	200	86,842	0.16	12.46	14.66
Fallbrook		80,574,549	90%	72,517,094	200	362,585	0.25	33.30	39.17
Jamul-Dulzura		32,449,632	90%	29,204,669	200	146,023	0.25	13.41	15.78
Julian		6,433,047	90%	5,789,743	200	28,949	0.16	4.15	4.89
Lakeside[6]		98,162,693	90%	88,346,424	200	441,732	0.25	40.56	47.72
Mountain Empire		232,582	90%	209,324	200	1,047	0.16	0.15	0.18
Mountain Empire	Boulevard	2,606,683	90%	2,346,015	200	11,730	0.16	1.68	1.98
Mountain Empire	Jacumba	3,496,697	90%	3,147,027	200	15,735	0.16	2.26	2.66
Mountain Empire	Lake Morena/Campo	4,489,328	90%	4,040,396	200	20,202	0.16	2.90	3.41
Mountain Empire	Potrero	1,902,476	90%	1,712,228	200	8,561	0.16	1.23	1.45
Mountain Empire	Tecate	413,002	90%	371,702	200	1,859	0.16	0.27	0.31
North County Metro		79,782,141	90%	71,803,927	200	359,020	0.25	32.97	38.79
North County Metro	Hidden Meadows	15,764,521	90%	14,188,069	200	70,940	0.25	6.51	7.66
North County Metro	Twin Oaks	5,355,905	90%	4,820,314	200	24,102	0.25	2.21	2.60
North Mountain	North Mountain	7,963,394	90%	7,167,055	200	35,835	0.16	5.14	6.05
North Mountain	Palomar Mountain	895,128	90%	805,615	200	4,028	0.16	0.58	0.68
Otay		9,330,747	90%	8,397,672	200	41,988	0.16	6.02	7.09
Pala-Pauma	Pala-Pauma	13,647,910	90%	12,283,119	200	61,416	0.25	5.64	6.63
Pendleton-De Luz		18,792,148	90%	16,912,933	200	84,565	0.25	7.77	9.14
Rainbow		3,945,155	90%	3,550,639	200	17,753	0.25	1.63	1.92
Ramona		66,141,794	90%	59,527,615	200	297,638	0.25	27.33	32.15
San Dieguito		84,503,793	90%	76,053,414	200	380,267	0.25	34.92	41.08
Spring Valley		60,518,394	90%	54,466,555	200	272,333	0.25	25.01	29.42
Sweetwater		21,940,307	90%	19,746,276	200	98,731	0.25	9.07	10.67
Valle De Oro		70,119,486	90%	63,107,538	200	315,538	0.25	28.97	34.09
Valley Center		52,444,265	90%	47,199,838	200	235,999	0.25	21.67	25.50
Total		**$872,230,555**	--	**$785,007,500**	--	**3,925,037**	--	**375.77**	**442.08**

[1]Estimated percentage of resident expenditures that will occur within CPA.
[2]Assumes an average rent of $1.33/sq.ft per month.
[3]Estimated buying power divided by average sales per square foot.
[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).
[5]Net acreage equal to 85% of gross acreage.
[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-15
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Gross Acres of Retail Space in Regional and Super Regional Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Regional & Super-Regional Centers ($2001)	Capture Rate[1]	Captured Sales ($2001)	Average Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$76,903,434	0%	$0	$309	-	0.25	-	-
Barona		n/a	0%	n/a	309	n/a	0.25	n/a	n/a
Bonsall	Bonsall	$38,500,458	0%	0	309	-	0.25	-	-
Central Mountain		$310,146	0%	0	309	-	0.16	-	-
Central Mountain	Cuyamaca	$1,113,506	0%	0	309	-	0.16	-	-
Central Mountain	Descanso	$3,649,525	0%	0	309	-	0.16	-	-
Central Mountain	Pine Valley	$4,414,859	0%	0	309	-	0.16	-	-
County Islands		$6,315,090	0%	0	309	-	0.25	-	-
Crest/Dehesa		$23,071,595	0%	0	309	-	0.25	-	-
Desert		$3,200,454	0%	0	309	-	0.16	-	-
Desert	Borrego Springs	$27,372,357	0%	0	309	-	0.16	-	-
Fallbrook		$114,286,173	0%	0	309	-	0.25	-	-
Jamul-Dulzura		$46,026,250	0%	0	309	-	0.25	-	-
Julian		$9,124,573	0%	0	309	-	0.16	-	-
Lakeside[6]		$139,233,030	0%	0	309	-	0.25	-	-
Mountain Empire		$329,892	0%	0	309	-	0.16	-	-
Mountain Empire	Boulevard	$3,697,294	0%	0	309	-	0.16	-	-
Mountain Empire	Jacumba	$4,959,682	0%	0	309	-	0.16	-	-
Mountain Empire	Lake Morena/Campo	$6,367,621	0%	0	309	-	0.16	-	-
Mountain Empire	Potrero	$2,698,454	0%	0	309	-	0.16	-	-
Mountain Empire	Tecate	$585,799	0%	0	309	-	0.16	-	-
North County Metro		$113,162,229	0%	0	309	-	0.25	-	-
North County Metro	Hidden Meadows	$22,360,246	0%	0	309	-	0.25	-	-
North County Metro	Twin Oaks	$7,596,764	0%	0	309	-	0.25	-	-
North Mountain	North Mountain	$11,295,203	0%	0	309	-	0.16	-	-
North Mountain	Palomar Mountain	$1,269,641	0%	0	309	-	0.16	-	-
Otay		$13,234,642	0%	0	309	-	0.16	-	-
Pala-Pauma	Pala-Pauma	$19,358,065	0%	0	309	-	0.25	-	-
Pendleton-De Luz		$26,654,604	0%	0	309	-	0.25	-	-
Rainbow		$5,595,770	0%	0	309	-	0.25	-	-
Ramona		$93,814,892	0%	0	309	-	0.25	-	-
San Dieguito		$119,859,376	0%	0	309	-	0.25	-	-
Spring Valley		$85,838,715	0%	0	309	-	0.25	-	-
Sweetwater		$31,119,923	0%	0	309	-	0.25	-	-
Valle De Oro		$99,456,813	0%	0	309	-	0.25	-	-
Valley Center		$74,386,446	0%	0	309	-	0.25	-	-
Total		**$1,237,163,522**	**--**	**$0**	**--**	**-**	**--**	**-**	**-**

[1]Estimated percentage of resident expenditures likely to occur within CPA.

[2]Based on ERA knowledge of local retail market, reported in 2001 dollars.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-16
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Supportable Square Feet of Retail Space Outside of Centers

Community Planning Area (CPA)	Subarea Group	Estimated Resident Buying Power: Non-Center ($2001)	Capture Rate[1]	Captured Sales ($2001)	Assumed Sales per Sq.Ft. ($2001)[2]	Estimated Supportable Sq. Ft.[3]	FAR Assumption[4]	Estimated Net Acreage[5]	Estimated Gross Acreage[5]
Alpine		$121,358,188	90%	$109,222,369	$200	546,112	0.25	50.15	59.00
Barona		n/a	90%	n/a	$200	n/a	0.25	n/a	n/a
Bonsall	Bonsall	60,756,009	90%	54,680,408	$200	273,402	0.25	25.11	29.54
Central Mountain		489,429	90%	440,486	$200	2,202	0.16	0.32	0.37
Central Mountain	Cuyamaca	1,757,179	90%	1,581,461	$200	7,907	0.16	1.13	1.33
Central Mountain	Descanso	5,759,168	90%	5,183,251	$200	25,916	0.16	3.72	4.37
Central Mountain	Pine Valley	6,966,909	90%	6,270,218	$200	31,351	0.16	4.50	5.29
County Islands		9,965,587	90%	8,969,028	$200	44,845	0.25	4.12	4.84
Crest/Dehesa		36,408,348	90%	32,767,513	$200	163,838	0.25	15.04	17.70
Desert		5,050,507	90%	4,545,456	$200	22,727	0.16	3.26	3.84
Desert	Borrego Springs	43,195,206	90%	38,875,685	$200	194,378	0.16	27.89	32.81
Fallbrook		180,350,371	90%	162,315,334	$200	811,577	0.25	74.52	87.68
Jamul-Dulzura		72,632,156	90%	65,368,941	$200	326,845	0.25	30.01	35.31
Julian		14,399,119	90%	12,959,207	$200	64,796	0.16	9.30	10.94
Lakeside[6]		219.717.992	90%	197.746.193	$200	988.731	0.25	90.79	106.81
Mountain Empire		520,589	90%	468,530	$200	2,343	0.16	0.34	0.40
Mountain Empire	Boulevard	5,834,550	90%	5,251,095	$200	26,255	0.16	3.77	4.43
Mountain Empire	Jacumba	7,826,672	90%	7,044,005	$200	35,220	0.16	5.05	5.95
Mountain Empire	Lake Morena/Campo	10,048,484	90%	9,043,635	$200	45,218	0.16	6.49	7.63
Mountain Empire	Potrero	4,258,320	90%	3,832,488	$200	19,162	0.16	2.75	3.23
Mountain Empire	Tecate	924,425	90%	831,983	$200	4,160	0.16	0.60	0.70
North County Metro		178,576,720	90%	160,719,048	$200	803,595	0.25	73.79	86.81
North County Metro	Hidden Meadows	35,285,797	90%	31,757,218	$200	158,786	0.25	14.58	17.15
North County Metro	Twin Oaks	11,988,145	90%	10,789,331	$200	53,947	0.25	4.95	5.83
North Mountain	North Mountain	17,824,501	90%	16,042,051	$200	80,210	0.16	11.51	13.54
North Mountain	Palomar Mountain	2,003,569	90%	1,803,213	$200	9,016	0.16	1.29	1.52
Otay		20,885,052	90%	18,796,547	$200	93,983	0.16	13.48	15.86
Pala-Pauma	Pala-Pauma	30,548,177	90%	27,493,359	$200	137,467	0.25	12.62	14.85
Pendleton-De Luz		42,062,548	90%	37,856,293	$200	189,281	0.25	17.38	20.45
Rainbow		8,830,458	90%	7,947,412	$200	39,737	0.25	3.65	4.29
Ramona		148,045,472	90%	133,240,925	$200	666,205	0.25	61.18	71.97
San Dieguito		189,145,215	90%	170,230,694	$200	851,153	0.25	78.16	91.95
Spring Valley		135,458,591	90%	121,912,732	$200	609,564	0.25	55.97	65.85
Sweetwater		49,109,087	90%	44,198,178	$200	220,991	0.25	20.29	23.87
Valle De Oro		156,948,758	90%	141,253,883	$200	706,269	0.25	64.85	76.30
Valley Center		117,386,231	90%	105,647,608	$200	528,238	0.25	48.51	57.07
Total		**$1,952,317,530**	**--**	**$1,757,085,777**	**--**	**8,785,429**	**--**	**841.08**	**989.51**

[1]Estimated percentage of resident expenditures likely to occur within CPA.

[2]Assumes an average rent of $1.33/sq.ft per month.

[3]Estimated buying power divided by average sales per square foot.

[4]Based on average Floor Area Ratios (FAR) countywide (0.25 for communities within CWA and 0.16 for communities outside CWA).

[5]Net acreage equal to 85% of gross acreage.

[6]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-17
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Total Supportable Retail Acres for Neighborhood, Community & Non-Center Outlets

Community Planning Area (CPA)	Subarea Group	Estimated Net Acreage[1]	Estimated Gross Acreage[2]
Alpine		88.51	104.13
Barona		n/a	n/a
Bonsall	Bonsall	44.31	52.13
Central Mountain		0.56	0.66
Central Mountain	Cuyamaca	2.00	2.36
Central Mountain	Descanso	6.56	7.72
Central Mountain	Pine Valley	7.94	9.34
County Islands		7.27	8.55
Crest/Dehesa		26.55	31.24
Desert		5.76	6.77
Desert	Borrego Springs	49.22	57.91
Fallbrook		131.53	154.74
Jamul-Dulzura		52.97	62.32
Julian		16.41	19.30
Lakeside[3]		160.24	188.52
Mountain Empire		0.59	0.70
Mountain Empire	Boulevard	6.65	7.82
Mountain Empire	Jacumba	8.92	10.49
Mountain Empire	Lake Morena/Campo	11.45	13.47
Mountain Empire	Potrero	4.85	5.71
Mountain Empire	Tecate	1.05	1.24
North County Metro		130.24	153.22
North County Metro	Hidden Meadows	25.73	30.28
North County Metro	Twin Oaks	8.74	10.29
North Mountain	North Mountain	20.31	23.90
North Mountain	Palomar Mountain	2.28	2.69
Otay		23.80	28.00
Pala-Pauma	Pala-Pauma	22.28	26.21
Pendleton-De Luz		30.68	36.09
Rainbow		6.44	7.58
Ramona		107.97	127.03
San Dieguito		137.95	162.29
Spring Valley		98.79	116.23
Sweetwater		35.82	42.14
Valle De Oro		114.47	134.67
Valley Center		85.61	100.72
Total		**1,484.47**	**1,746.44**

[1]Based on an estimated Floor Area Ratio (FAR) of 0.25
[2]Net acreage equal to 85% of gross acreage.
[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), and Economics Research Associates.

Table B-18
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.
Retail Land Comparison: Current Developed Retail Acres & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current Developed Retail Acres with Estimated Future Supportable Acres[1]	
			Current Developed Retail Acres	Surplus/(Deficit)
Alpine		104.13	83.04	(21.09)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	52.13	28.31	(23.82)
Central Mountain		0.66	0.00	(0.66)
Central Mountain	Cuyamaca	2.36	1.48	(0.88)
Central Mountain	Descanso	7.72	4.85	(2.87)
Central Mountain	Pine Valley	9.34	16.81	7.47
County Islands		8.55	1.16	(7.39)
Crest/Dehesa		31.24	5.61	(25.63)
Desert		6.77	0.00	(6.77)
Desert	Borrego Springs	57.91	64.37	6.46
Fallbrook		154.74	110.58	(44.16)
Jamul-Dulzura		62.32	22.14	(40.18)
Julian		19.30	30.67	11.37
Lakeside[3]		188.52	212.43	23.91
Mountain Empire		0.70	0.00	(0.70)
Mountain Empire	Boulevard	7.82	30.41	22.59
Mountain Empire	Jacumba	10.49	12.67	2.18
Mountain Empire	Lake Morena/Campo	13.47	16.44	2.97
Mountain Empire	Potrero	5.71	1.27	(4.44)
Mountain Empire	Tecate	1.24	3.65	2.41
North County Metro		153.22	21.94	(131.28)
North County Metro	Hidden Meadows	30.28	1.28	(29.00)
North County Metro	Twin Oaks	10.29	1.06	(9.23)
North Mountain	North Mountain	23.90	21.64	(2.26)
North Mountain	Palomar Mountain	2.69	3.45	0.76
Otay		28.00	0.00	(28.00)
Pala-Pauma	Pala-Pauma	26.21	5.67	(20.54)
Pendleton-De Luz		36.09	69.68	33.59
Rainbow		7.58	6.82	(0.76)
Ramona		127.03	129.69	2.66
San Dieguito		162.29	28.33	(133.96)
Spring Valley		116.23	129.67	13.44
Sweetwater		42.14	10.19	(31.95)
Valle De Oro		134.67	169.88	35.21
Valley Center		100.72	27.41	(73.31)
Total		**1,746.44**	**1,272.60**	**(473.84)**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-19
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.

Retail Land Comparison: Retail Land Allowed Under Current General Plan & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Current General Plan with Estimated Future Supportable Acres[1]	
			Estimated Gross Acreage Allowed under Current GP	Surplus/(Deficit)
Alpine		104.13	110.18	6.05
Barona		n/a	n/a	n/a
Bonsall	Bonsall	52.13	125.72	73.59
Central Mountain		0.66	0.00	(0.66)
Central Mountain	Cuyamaca	2.36	0.00	(2.36)
Central Mountain	Descanso	7.72	5.46	(2.26)
Central Mountain	Pine Valley	9.34	17.10	7.76
County Islands		8.55	1.10	(7.45)
Crest/Dehesa		31.24	13.68	(17.56)
Desert		6.77	0.00	(6.77)
Desert	Borrego Springs	57.91	333.51	275.60
Fallbrook		154.74	236.51	81.77
Jamul-Dulzura		62.32	87.38	25.06
Julian		19.30	75.03	55.73
Lakeside[3]		188.52	380.77	192.25
Mountain Empire		0.70	28.50	27.80
Mountain Empire	Boulevard	7.82	121.18	113.36
Mountain Empire	Jacumba	10.49	18.20	7.71
Mountain Empire	Lake Morena/Campo	13.47	48.20	34.73
Mountain Empire	Potrero	5.71	14.94	9.23
Mountain Empire	Tecate	1.24	40.23	38.99
North County Metro		153.22	36.90	(116.32)
North County Metro	Hidden Meadows	30.28	39.30	9.02
North County Metro	Twin Oaks	10.29	22.60	12.31
North Mountain	North Mountain	23.90	13.01	(10.89)
North Mountain	Palomar Mountain	2.69	0.00	(2.69)
Otay		28.00	111.20	83.20
Pala-Pauma	Pala-Pauma	26.21	37.08	10.87
Pendleton-De Luz		36.09	0.00	(36.09)
Rainbow		7.58	31.95	24.37
Ramona		127.03	274.25	147.22
San Dieguito		162.29	45.05	(117.24)
Spring Valley		116.23	205.37	89.14
Sweetwater		42.14	29.92	(12.22)
Valle De Oro		134.67	219.73	85.06
Valley Center		100.72	100.21	(0.51)
Total		**1,746.4**	**2,824.26**	**1,077.83**

[1]Includes only neighborhood, community, and non-center retail acres; provided by Technology Associates International Corporation.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table B-20
Sensitivity Analysis Scenario 1: Retail Sales @ $200/Sq. Ft.

Retail Land Comparison: Retail Land Allowed Under Proposed General Plan & Forecasted Supportable Retail Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Resident Supported Retail Acres At Build-out[2]	Comparison of Proposed General Plan with Estimated Future Supportable Acres[1]	
			Estimated Gross Acreage Allowed under Proposed GP	Surplus/(Deficit)
Alpine		104.13	134.46	30.33
Barona		n/a	0.00	n/a
Bonsall	Bonsall	52.13	127.77	75.64
Central Mountain		0.66	0.00	(0.66)
Central Mountain	Cuyamaca	2.36	1.98	(0.38)
Central Mountain	Descanso	7.72	6.63	(1.09)
Central Mountain	Pine Valley	9.34	19.09	9.75
County Islands		8.55	0.00	(8.55)
Crest/Dehesa		31.24	17.01	(14.23)
Desert		6.77	18.79	12.02
Desert	Borrego Springs	57.91	281.51	223.60
Fallbrook		154.74	240.18	85.44
Jamul-Dulzura		62.32	88.28	25.96
Julian		19.30	71.65	52.35
Lakeside[3]		188.52	380.77	192.25
Mountain Empire		0.70	28.50	27.80
Mountain Empire	Boulevard	7.82	122.17	114.35
Mountain Empire	Jacumba	10.49	24.50	14.01
Mountain Empire	Lake Morena/Campo	13.47	51.39	37.92
Mountain Empire	Potrero	5.71	24.30	18.59
Mountain Empire	Tecate	1.24	54.72	53.48
North County Metro		153.22	53.55	(99.67)
North County Metro	Hidden Meadows	30.28	2.07	(28.21)
North County Metro	Twin Oaks	10.29	39.45	29.16
North Mountain	North Mountain	23.90	38.07	14.17
North Mountain	Palomar Mountain	2.69	1.53	(1.16)
Otay		28.00	111.20	83.20
Pala-Pauma	Pala-Pauma	26.21	36.36	10.15
Pendleton-De Luz		36.09	0.00	(36.09)
Rainbow		7.58	41.22	33.64
Ramona		127.03	336.63	209.60
San Dieguito		162.29	44.65	(117.64)
Spring Valley		116.23	200.78	84.55
Sweetwater		42.14	29.92	(12.22)
Valle De Oro		134.67	218.66	83.99
Valley Center		100.72	215.53	114.81
Total		**1,746.4**	**3,063.32**	**1,316.89**

[1]Includes Neighborhood Commercial, Service Commercial, and Rural Commercial designated lands, two-thirds of General Commercial lands, for the July 2004 Baseline General Plan Scenario, plus an assumed share of Specific Plan Areas per County staff estimates in 2002.

[2]Neighborhood and community serving only. Regional/Superregional not included as these are likely to occur in more urbanized areas.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-1
Projected Demand for Industrial Space by County CPA, 2020

Industrial Space Demand by CPA:

Space Per Employee (sq.ft.):	500

Community Planning Area (CPA)	Subarea Group	Projected 2020 Employment[1]	Space Demand in 2020 (s.f.)	Net Land Area Demand in 2020 (acres)[2]	Gross Land Area Demand in 2020 (acres)[3]
Alpine		705	352,715	17.99	25.71
Barona		197	98,250	5.01	7.16
Bonsall	Bonsall	642	321,080	16.38	23.40
Central Mountain		133	66,555	3.40	4.85
County Islands		55	27,335	1.39	1.99
Crest/Dehesa		443	221,660	11.31	16.15
Desert		1,504	752,180	38.37	54.82
Desert	Borrego Springs	n/a	n/a	n/a	n/a
Fallbrook		3,208	1,604,130	81.84	116.91
Jamul-Dulzura		487	243,655	12.43	17.76
Julian		270	134,780	6.88	9.82
Lakeside[4]		3,821	1,910,315	97.46	243.64
Mountain Empire		697	348,450	17.78	25.39
North County Metro		2,638	1,318,885	67.28	96.12
North Mountain	North Mountain	122	61,080	3.12	4.45
Otay		512	255,875	13.05	18.65
Pala-Pauma	Pala-Pauma	403	201,310	10.27	14.67
Pendleton-De Luz		779	389,360	19.86	28.38
Rainbow		175	87,610	4.47	6.38
Ramona		1,982	991,165	50.56	72.23
San Dieguito		1,974	986,900	50.35	71.92
Spring Valley		2,288	1,143,815	58.35	83.36
Sweetwater		363	181,340	9.25	13.22
Valle De Oro		1,026	513,240	26.18	37.40
Valley Center		849	424,505	21.66	30.94
CPA Total		25,272	12,636,190	645	1,025.33

[1]Based on SANDAG Subregional Forecast (2020 Cities/County Forecast); Employment in industries using industrial space includes 97% of manufacturing; 20% of construction; 40% of transportation, communications & public utilities; 100% of wholesale trade; and 25% of services.

[2]Based on a site coverage ratio of 45%.

[3]Based on a site net to gross ratio of 70%, except Lakeside which is an assumed 40% per County staff.

[4]Pepper Drive/Bostonia merged into Lakeside CPA.

Source: Economics Research Associates

Table C-2

Employment Land Comparison: Current Developed Industrial Acres & 2020 Supportable Industrial Acres

Community Planning Area (CPA)	Subarea Group	2020 Estimated Gross Supportable Industrial Acres	Comparison of Currently Developed Industrial Acres with Estimated Future Supportable Acres	
			Currently Developed Industrial Acres[1]	2020 Surplus/(Deficit)
Alpine		25.7	5.7	(20.0)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	23.4	1.1	(22.3)
Central Mountain		4.9	0.0	(4.9)
County Islands		2.0	3.1	1.1
Crest/Dehesa		16.2	0.3	(15.8)
Desert		54.8	1.2	(53.6)
Fallbrook		116.9	54.5	(62.4)
Jamul-Dulzura		17.8	6.2	(11.5)
Julian		9.8	0.0	(9.8)
Lakeside[2]		243.6	261.2	17.5
Mountain Empire		25.4	33.6	8.2
North County Metro		96.1	93.3	(2.8)
North Mountain	North Mountain	4.5	0.7	(3.8)
Otay		18.6	0.1	(18.6)
Pala-Pauma	Pala-Pauma	14.7	10.0	(4.6)
Pendleton-De Luz		28.4	189.9	161.5
Rainbow		6.4	4.2	(2.1)
Ramona		72.2	61.2	(11.0)
San Dieguito		71.9	123.4	51.5
Spring Valley		83.4	217.1	133.8
Sweetwater		13.2	0.0	(13.2)
Valle De Oro		37.4	2.2	(35.2)
Valley Center		30.9	26.8	(4.1)
Total		**1,018.2**	**1,095.7**	**77.5**

[1]From SANDAG 2001 GIS Database; includes SANDAG Land Use Categories (Codes) Industrial Parks (2101), Light Industry-General (2103), Warehousing & Public Storage (2104), Wholesale Trade (5001), and Industrial Under Construction (9503). Communications and Utilities (4113) was omitted as it encompasses large acreages which appear to be right-of-ways.

[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-3

Employment Land Comparison: Industrial Land Allowed Under Current General Plan & 2020 Supportable Industrial Acres

Community Planning Area (CPA)	Subarea Group	2020 Estimated Gross Supportable Industrial Acres	Comparison of Current General Plan with Estimated Future Supportable Acres	
			Estimated Gross Acreage Allowed under Current GP[1]	2020 Surplus/(Deficit)
Alpine		25.7	118.3	92.6
Barona		n/a	n/a	n/a
Bonsall	Bonsall	23.4	0.0	(23.4)
Central Mountain		4.9	15.0	10.2
County Islands		2.0	1.0	(1.0)
Crest/Dehesa		16.2	0.0	(16.2)
Desert		54.8	195.2	140.4
Fallbrook		116.9	172.3	55.4
Jamul-Dulzura		17.8	6.4	(11.4)
Julian		9.8	46.9	37.0
Lakeside[2]		243.6	1,122.6	878.9
Mountain Empire		25.4	225.6	200.2
North County Metro		96.1	91.4	(4.7)
North Mountain	North Mountain	4.5	8.5	4.0
Otay		18.6	2,289.3	2,270.7
Pala-Pauma	Pala-Pauma	14.7	0.0	(14.7)
Pendleton-De Luz		28.4	0.0	(28.4)
Rainbow		6.4	0.0	(6.4)
Ramona		72.2	341.1	268.8
San Dieguito		71.9	159.0	87.1
Spring Valley		83.4	362.3	279.0
Sweetwater		13.2	0.0	(13.2)
Valle De Oro		37.4	1.8	(35.6)
Valley Center		30.9	124.9	93.9
Total		**1,018.2**	**5,281.5**	**4,263.3**

[1]Includes portions of lands classified as Service Commercial (80%), Limited Impact Industrial (90%), General Impact Industrial (100%), and relevant SPAs. Provided by County of San Diego and Technology Associates International Corporation.

[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, Consumer Expenditures in 2000 (Bureau of Labor Statistics, US Department of Labor), SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-4

Employment Land Comparison: Industrial Land Allowed Under Proposed Baseline General Plan Scenario & 2020 Supportable Industrial Acres

Community Planning Area (CPA)	Subarea Group	2020 Estimated Gross Supportable Industrial Acres[2]	Comparison of Proposed General Plan with Estimated Future Supportable Acres[1]	
			Estimated Gross Acreage Allowed under Proposed GP	2020 Surplus/(Deficit)
Alpine		25.71	131.9	106.2
Barona		n/a	n/a	n/a
Bonsall	Bonsall	23.40	0.0	(23.4)
Central Mountain		4.85	12.9	8.0
County Islands		1.99	54.7	52.7
Crest/Dehesa		16.15	0.0	(16.2)
Desert		54.82	60.9	6.1
Fallbrook		116.91	477.5	360.6
Jamul-Dulzura		17.76	4.9	(12.9)
Julian		9.82	48.1	38.3
Lakeside[3]		243.64	1,122.6	878.9
Mountain Empire		25.39	242.8	217.4
North County Metro		96.12	48.9	(47.2)
North Mountain	North Mountain	4.45	0.0	(4.5)
Otay		18.65	2,289.3	2,270.7
Pala-Pauma	Pala-Pauma	14.67	0.0	(14.7)
Pendleton-De Luz		28.38	0.0	(28.4)
Rainbow		6.38	0.0	(6.4)
Ramona		72.23	226.9	154.6
San Dieguito		71.92	159.0	87.1
Spring Valley		83.36	294.9	211.6
Sweetwater		13.22	0.0	(13.2)
Valle De Oro		37.40	2.0	(35.4)
Valley Center		30.94	95.6	64.6
Total		**1,018.2**	**5,272.9**	**4,254.7**

[1]Based on estimates shown in Table 13.

[2]Includes portions of lands classified as Service Commercial (80%), Limited Impact Industrial (90%), General Impact Industrial (100%), and relevant SPAs. Provided by County of San Diego and Technology Associates International Corporation.

[3]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-5
Projected Demand for Office Space by County CPA, 2020

Office Space Demand by CPA:

Space Per Employee (sq.ft.):	190

Office Space Demand by CPA:

Community Planning Area (CPA)	Subarea Group	Projected Employment[1]	Space Demand for Period (s.f.)	Net Space Demand for Period (acres)[2]	Gross Space Demand for Period (acres)[3]
Alpine		991	188,294	11.38	16.25
Barona		n/a	n/a	n/a	n/a
Bonsall	Bonsall	531	100,898	6.10	8.71
Central Mountain		133	25,183	1.52	2.17
County Islands		151	28,686	1.73	2.48
Crest/Dehesa		586	111,346	6.73	9.61
Desert		1,757	333,914	20.17	28.82
Fallbrook		2,416	459,019	27.73	39.62
Jamul-Dulzura		358	67,971	4.11	5.87
Julian		223	42,311	2.56	3.65
Lakeside[4]		2,834	538,416	32.53	46.47
Mountain Empire		559	106,239	6.42	9.17
North County Metro		1,803	342,576	20.70	29.57
North Mountain	North Mountain	175	33,277	2.01	2.87
Otay		583	110,685	6.69	9.55
Pala-Pauma	Pala-Pauma	206	39,174	2.37	3.38
Pendleton-De Luz		675	128,313	7.75	11.07
Rainbow		56	10,579	0.64	0.91
Ramona		1,808	343,448	20.75	29.64
San Dieguito		2,042	387,933	23.44	33.48
Spring Valley		1,680	319,270	19.29	27.55
Sweetwater		622	118,136	7.14	10.20
Valle De Oro		1,387	263,543	15.92	22.74
Valley Center		600	114,074	6.89	9.85
CPA Total		22,175	4,213,282	254.54	363.62

[1]Based on SANDAG Subregional Forecast (2020 Cities/County Forecast); Employment in industries using office space includes 3% of manufacturing; 35% of transportation, communications & public utilities; 100% of finance, insurance & real estate; 35% of services (including medical); and 5% of self-employment.

[2]Based on a site coverage ratio of 38%.

[3]Based on a site net to gross ratio of 70%.

[4]Pepper Drive/Bostonia merged into Lakeside CPA.

Source: Economics Research Associates

Table C-6

Employment Land Comparison: Current Developed Office Acres & 2020 Supportable Office Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Supportable Office Acres	Comparison of Current Developed Office Acres with Estimated Future Supportable Acres	
			Current Developed Office Acres[1]	2020 Surplus/(Deficit)
Alpine		16.25	5.1	(11.1)
Barona		n/a	n/a	n/a
Bonsall	Bonsall	8.71	0.0	(8.7)
Central Mountain		2.17	0.0	(2.2)
County Islands		2.48	0.0	(2.5)
Crest/Dehesa		9.61	0.7	(8.9)
Desert		28.82	0.4	(28.4)
Fallbrook		39.62	24.3	(15.3)
Jamul-Dulzura		5.87	2.0	(3.9)
Julian		3.65	0.0	(3.7)
Lakeside[2]		46.47	23.4	(23.0)
Mountain Empire		9.17	0.0	(9.2)
North County Metro		29.57	0.0	(29.6)
North Mountain	North Mountain	2.87	7.2	4.4
Otay		9.55	0.0	(9.6)
Pala-Pauma	Pala-Pauma	3.38	0.0	(3.4)
Pendleton-De Luz		11.07	38.9	27.9
Rainbow		0.91	0.0	(0.9)
Ramona		29.64	13.5	(16.1)
San Dieguito		33.48	28.6	(4.9)
Spring Valley		27.55	3.7	(23.9)
Sweetwater		10.20	5.8	(4.4)
Valle De Oro		22.74	3.8	(18.9)
Valley Center		9.85	9.5	(0.4)
Total		**363.62**	**167.5**	**(196.6)**

[1]Includes lands designated as Low-Rise Office (per SANDAG's 2001 GIS Database).

[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-7

Employment Land Comparison: Office Land Allowed Under Current General Plan & 2020 Supportable Office Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Supportable Office Acres	Comparison of Current General Plan with Estimated Future Supportable Acres	
			Estimated Gross Acreage Allowed under Current GP[1]	2020 Surplus/(Deficit)
Alpine		16.25	29.6	13.4
Barona		n/a	n/a	n/a
Bonsall	Bonsall	8.71	43.1	34.4
Central Mountain		2.17	10.1	7.9
County Islands		2.48	0.1	(2.4)
Crest/Dehesa		9.61	1.5	(8.1)
Desert		28.82	99.1	70.2
Fallbrook		39.62	86.9	47.3
Jamul-Dulzura		5.87	6.2	0.4
Julian		3.65	7.9	4.3
Lakeside[2]		46.47	70.5	24.0
Mountain Empire		9.17	51.4	42.2
North County Metro		29.57	23.2	(6.3)
North Mountain	North Mountain	2.87	4.3	1.4
Otay		9.55	141.5	131.9
Pala-Pauma	Pala-Pauma	3.38	4.1	0.7
Pendleton-De Luz		11.07	0.0	(11.1)
Rainbow		0.91	3.6	2.6
Ramona		29.64	132.8	103.1
San Dieguito		33.48	45.6	12.2
Spring Valley		27.55	63.2	35.7
Sweetwater		10.20	18.0	7.8
Valle De Oro		22.74	51.9	29.2
Valley Center		9.85	18.2	8.4
Total		**363.6**	**912.9**	**549.2**

[1]Includes portions of lands designated as Office Professional (100%), General Commercial (10%), Service Commercial, and Rural Commercial (10%), and Limited Impact Industrial (10%), and relevant SPAs (provided by County staff and Technology Associates International Corporation).

[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, SANDAG 2001 GIS Database, and Economics Research Associates.

Table C-8

Employment Land Comparison: Office Land Allowed Under Proposed Baseline General Plan Scenario & 2020 Supportable Office Acres

Community Planning Area (CPA)	Subarea Group	Estimated Gross Supportable Office Acres	Comparison of Proposed General Plan with Estimated Future Supportable Acres	
			Estimated Gross Acreage Allowed under Proposed GP[1]	2020 Surplus/(Deficit)
Alpine		16.25	25.7	9.4
Barona		n/a	n/a	n/a
Bonsall	Bonsall	8.71	45.0	36.3
Central Mountain		2.17	7.2	5.0
County Islands		2.48	6.1	3.6
Crest/Dehesa		9.61	1.9	(7.7)
Desert		28.82	49.3	20.5
Fallbrook		39.62	116.0	76.4
Jamul-Dulzura		5.87	17.2	11.4
Julian		3.65	11.3	7.6
Lakeside[2]		46.47	70.5	24.0
Mountain Empire		9.17	35.1	25.9
North County Metro		29.57	206.2	176.6
Otay		9.55	141.5	131.9
Pala-Pauma	Pala-Pauma	3.38	4.1	0.7
Pendleton-De Luz		11.07	0.0	(11.1)
Rainbow		0.91	4.6	3.7
Ramona		29.64	68.8	39.1
San Dieguito		33.48	45.6	12.2
Spring Valley		27.55	48.5	21.0
Sweetwater		10.20	17.8	7.6
Valle De Oro		22.74	52.1	29.3
Valley Center		9.85	34.5	24.7
Total		**363.6**	**1,044.5**	**651.0**

[1]Includes portions of lands designated as Office Professional (100%), General Commercial (10%), Service Commercial, and Rural Commercial (10%), and Limited Impact Industrial (10%), and relevant SPAs (provided by County staff and Technology Associates International Corporation).

[2]Pepper Drive/Bostonia CPA merged into Lakeside CPA

Sources: Technology Associates International Corporation, SANDAG 2001 GIS Database, and Economics Research Associates.

Attachment H-10.2

Downzoning and Rural Land Markets: A review of two recent studies in Maryland and New Jersey

Maryland Center for Agro-Ecology, Inc.

July 2006

MCAE Pub 2006-01

Downzoning and Rural Land Markets:

A review of two recent studies in Maryland and New Jersey

Submitted to the Maryland Center for Agro-Ecology, Inc.

July 2006

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Executive Summary

Downzoning restricts the development of agricultural land by increasing the number of acres required for each housing unit. Downzoning has the potential to protect working landscapes from encroaching development, but there are concerns that this approach could cause serious harm to rural landowners through the reduction in property values. Two recent studies examined the effect of downzoning on agricultural land values in the mid-Atlantic region, reached differing conclusions, and have created confusion and uncertainty about the effects of downzoning. This project brought together a panel of experts who have extensive experience in property value studies, statistics, and environmental and resource economics to review the methods and conclusions of the two reports. The panel found serious errors in the research methodology of both reports, and believes there is little basis for the conclusions reached in the studies.

The first report, which we refer to as the Maryland study throughout the review, is titled "Downzoning: Does it Protect Working Landscapes and Maintain Equity for the Landowner?" The Maryland study was completed in December 2003 by a team of 8 co-authors, and was sponsored by the Maryland Center for Agro-Ecology. The second report, which we refer to as the New Jersey study, is titled "The Impact of Downzoning on Agricultural Land Value in New Jersey." The New Jersey study was completed in November 2004 by Michael Samuels of Clarion/Samuels Associates and was sponsored by the New Jersey Farm Bureau. The Maryland study found downzoning to have no impact or a small positive impact on agricultural property values, while the New Jersey study found large negative impacts from downzoning. Given the weaknesses in the methodologies, we have little confidence in either finding.

Economic theory does not give a clear answer on whether downzoning should decrease or increase property values. First, downzoning can negatively impact property values because it puts a constraint on development opportunities. This negative impact could be large for properties with great development potential. However, downzoning could also have several positive impacts that offset the loss of development opportunities. The positive effects could include the enhanced environmental and landscape amenities valued by buyers, protecting a critical mass of farms in the local agricultural community, and the viability of non-development land uses, reduced burdens on local government services such as schools and roads, and reduced uncertainty about future land use. Which of these offsetting effects dominates is an empirical question, and the magnitude of the effects will vary between markets and individual properties within the same market.

The Maryland study employs a statistical approach to examine market transactions in 7 Maryland counties over more than 20 years. While we believe a large sample statistical study of market transactions is the best general approach, the approach in this study is too aggregate, fails to control for many other influences on land value, and simply does not use the best available statistical techniques. The BACI (Before-After Control-Impact) approach is flawed for estimating property value impacts, and as far as

we know, has rarely appeared in the literature for over 40 years. The authors' own literature review does not cite any studies using this technique. In addition, the Maryland study also includes a qualitative analysis based mostly on interviews with local government officials. While the interviews provide important background information on changing land use policy, the sample interviewed may not represent the full range of views and the respondents may have a vested interest in the policies. We find the interviews provide insufficient support for the numerous strong conclusions derived from this information.

The New Jersey study develops a methodology based on real estate appraisal methods rather than utilizing statistical analysis based on land market transactions. Although based on well established real estate appraisal methods that are reliable in well-established markets with comparable sales, the study develops its own methodology that extends appraisal methods to a hypothetical property with no comparable sales by making a series of tenuous assumptions and calculations. They provide no citations of previous studies that utilize similar approaches. Their method is unreliable and is likely to overestimate the negative effect of downzoning on property values. Many of the assumptions are tenuous and some are inconsistent. Furthermore, their calculations focus solely on obtaining estimates of the negative development effect, and make no attempt to estimate the size of the offsetting positive effects. Finally, the sales comparison approach is based on a very small sample of 3-4 transactions in each case study area making their reliability by most any statistical standard somewhat suspect.

The best approach for estimating the impact of downzoning on property values is a cross-sectional time-series hedonic price analysis. Hedonic price analysis is a regression based statistical approach that uses individual properties as the unit of observation utilizing a large sample of properties with different zoning that share a common real estate market. Hedonic price analysis is well established in the peer reviewed literature and is the approach most commonly employed in previous studies of zoning impacts. The regression model can control for the impact of location, individual property and neighborhood characteristics, other land use policies. and can be designed to allow the impact of zoning to vary based on key characteristics of the property (e.g. parcel size, location). Researchers should also control for endogenous zoning (in other words local zoning changes are likely to be stimulated by some of the same factors that affect property values) within the hedonic model. Hedonic price analysis is also being used more frequently by professional appraisers where it is often referred to as the mass appraisal method. There are also some emerging techniques to control for unobserved effects in property markets that may work quite well in this setting.

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Introduction

Downzoning restricts the development of agricultural land by increasing the number of acres required for each housing unit. Downzoning has the potential to protect working landscapes from encroaching development, but there are concerns that this approach could cause serious harm to rural landowners through the reduction in property values. Two recent studies examined the effect of downzoning on agricultural land values in the mid-Atlantic region, reached differing conclusions, and have created confusion and uncertainty about the effects of downzoning. This project brought together a panel of experts who have extensive experience in property value studies, statistics, and environmental and resource economics to review the methods and conclusions of the two reports.

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Economic theory does not give a clear answer on whether downzoning should decrease or increase property values. First, downzoning can negatively impact property values because it puts a constraint on development opportunities. This negative impact could be large for properties with great development potential. However, downzoning could also have several positive impacts that offset the loss of development opportunities. The positive effects could include the enhanced environmental and landscape amenities valued by buyers, protecting a critical mass of farms in the local agricultural community, and the viability of non-development land uses, reduced burdens on local government services such as schools and roads, and reduced uncertainty about future land use. Which of these offsetting effects dominates is an empirical question, and the magnitude of the effects will vary between markets and individual properties within the same market.

Overall, the panel found very serious errors in the research methodology of both reports, and believes there is little basis for the conclusions reached in the studies. Both studies deviate from the published literature, and employ their own methodologies that do not employ the best available statistical and analytical techniques. A detailed review of each of the studies is contained in the sections that follow. The report concludes with a description of cross-sectional time-series hedonic price analysis, a technique that would draw far more reliable conclusions from the available data.

Literature Review

Both studies utilize a literature review as part of their analysis. The New Jersey study does a better job of establishing a theoretical basis for the study by considering academic publications and reaches sounder conclusions from the literature review, whereas the Maryland study does a much better job of identifying previous empirical studies that are overlooked by the New Jersey study. Most importantly, neither study uses the literature review to adequately inform their statistical and quantitative work. In addition to simply reviewing results, the literature review should establish the accepted methodology, and the analytical part of the research should either follow the literature or justify why an alternative approach is preferred. In this section, we briefly summarize the literature to provide context for our reviews. Most of the research cited in our summary is reviewed by the Maryland and New Jersey studies, although our perspective may be somewhat different. The detailed reviews of the studies contain some additional comments on the literature reviews that are specific to a particular study.

Plantinga, Lubowski, and Stavins (2002) study the effects of potential land development on agricultural land prices, and this paper is heavily emphasized by the New Jersey study. This paper develops a theoretical model of the determination of agricultural land prices based on the uncertainty and irreversibility of the conversion to urban/suburban use. This theoretical model in the paper motivates the empirical work, which estimates the contribution to land values of potential conversion for counties in the 48 contiguous states. The authors of the paper estimate results that seem quite plausible. When ranked by the share of land value that is due to potential development, New Jersey has the highest share, 82%. On the other hand, Maryland's share is only 29%. Nevertheless, Maryland has the seventh highest share. The New Jersey report partially attributes the different results in the two studies being evaluated here to the fact that Maryland's share is too small to estimate reliably with the Maryland data. However, a 29% average share in the state should be large enough that it could be detected in those counties with significant development pressure.

Hardie, Narayan and Gardner (2001) investigate the influence of farm and nonfarm factors on real estate values in the mid-Atlantic region. They use a simultaneous equation model of farm and house prices to jointly determine farmland prices. Their empirical model is estimated with data on real estate prices, farm returns, household income, and other factors influencing local returns from farming and development using county level data for 230 counties in 6 mid-Atlantic states (including New Jersey and Maryland), in 1982, 1987, and 1992. The paper finds that farmland values are more responsive to non-farm factors such as development potential than factors that impact the profitability of agricultural operations. One of the more important findings in the paper is that farmland prices rise more quickly than house prices as counties become more urban.

The Plantinga, Lubowski and Stavins (2002) and Hardie, Narayan, and Gardner (2001) papers are important because they establish that development value is the most important factor determining farmland prices within the region. Overall, development values are more important in New Jersey where a larger proportion of the state is

urbanized, but development values are still very large in Maryland, particularly in the Baltimore-Washington area west of the Chesapeake Bay. These studies suggest that the negative impact of downzoning on property values from development restrictions could be significant. However, they are not micro-level studies that specifically examine downzoning. Empirical studies of downzoning's impact on property values in agricultural areas include Henneberry and Barrows (1990), Vaillancourt and Monty (1985), and two unpublished studies that look at Maryland (Applied Data Resources 1996, Resource Management Consultants 1991). Both of the published studies use regression analysis similar to the models described at the beginning of the last section of this report.

Henneberry and Barrows (1990) examine the negative and positive effects of exclusive agricultural zoning in Wisconsin using a regression model on 120 parcels that span exclusive agricultural and non-agricultural zones by allowing the effects of the explanatory variables to vary between the two types of zoning. They find negative effects on property values for smaller parcels close to urban areas, and positive effects for large parcels, further from urban areas that have lower development potential. While the Henneberry and Barrows paper is a relatively simple study with a small data set, the results make sense and it provides a good foundation for researchers examining similar issues. It is important to note that they were studying a relatively rural area where the "urban" areas supplying development pressure were Beloit and Janesville, Wisconsin, small cities with populations of about 50,000. Janesville was experiencing some population growth during the study period, while Beloit was losing population. A similarly designed study with development pressure from New York, Philadelphia, Baltimore and Washington may have dramatically different results.

Vaillencourt and Monty (1985) look at the effect of agricultural preservation zoning instituted in Quebec (Canada) in the late 1970s using a regression model. They do not allow the effect of zoning to vary based on location and parcel characteristics, so their model simply gives an average impact of zoning across all properties. Their regression model uses data on over 1200 vacant land sales in rural areas surrounding Montreal, and the results show that agriculturally zoned land sold for 15-30% less than unzoned land.

In addition to the study reviewed in the following section, there have been two unpublished studies that have examined the impact of downzoning on agricultural land values in Maryland. Resource Management Consultants (1991) charted the average price of agricultural land sold each year in 6 counties that downzoned. Their report contains no statistical tests and does not control for individual property characteristics. From their charts, there is no visible decrease in average land values after downzoning. While the report is interesting and suggests that downzoning may not impact property values, it is impossible to draw any significant conclusions from very small samples with no property specific controls or formal statistical tests.

Applied Data Resources (1996) used regression analysis to examine the impact of the RC-2 (1 house per 50 acres) and RC-4 (1 house per 5 acres) zoned land in Northern

Baltimore County. Their regression results find that zoning had no statistically significant impact on unimproved sales prices in the area. However, it is important to note that they also did not find statistically significant impacts from the size of the parcel, and location variables such as distance to the Baltimore beltway. Time was the only factor they found to have a statistically significant impact on price. The lack of a relationship between parcel size and location and land prices raises serious questions about the accuracy of their model. Without knowing more details about how the data were compiled and the analysis conducted, it is difficult to know exactly what, if any, problem existed. However, virtually every published study on factors affecting rural property values, regardless of zoning, finds parcel size and location to have strong impacts. If their model is unable to detect the effect of these factors, it raises doubts about whether they can conclude anything about less obvious and more uncertain factors such as zoning.

Review of the Maryland Study

The title of this report, "Downzoning: Does It Protect Working Landscapes and Maintain Equity for the Landowner?" suggests that it will examine two questions. Does downzoning protect working landscapes? Does downzoning lower land values? Three general methodologies are used to examine one or both of these questions: a survey of the literature, a survey of individuals involved with the issue, and statistical analysis. The statistical analysis only examines the second question about land values, and that is also the question asked by the New Jersey study and the emphasis of this review.

The question of whether downzoning protects working landscapes is addressed in the literature review and interviews, but the study generally treats the idea that downzoning protects farms as a self-evident fact rather than an open research question. It should be acknowledged that other researchers are investigating exactly the opposite hypothesis, that downzoning contributes to urban sprawl. For example, McConnell, Walls, and Kopits (2005) suggest that zoning limits may cause low-density, sprawling development and find, using Maryland data, that it is one contributor. Irwin and Bockstael (2004) find (again using Maryland data) that the restriction on minimum lot size implied by zoning regulations has a positive and significant effect on the timing of development. This runs counter to preserving farmland. In fairness to the authors, we note that these recent local studies were published in the peer-reviewed literature shortly after the release of the Maryland study, but the view that zoning could contribute to sprawl has been around for a while and should be acknowledged.

At times, the tone of the report more closely resembles an advocacy document than a research report. Examples include statements such as "The future of our rural lands is of inestimable importance." The paragraph on the Oregon Land Use Act clearly states its goals without critically evaluating the results that followed. It would be worth acknowledging that in November 2004, 61% of Oregon voters passed an initiative requiring that compensation be paid for any adverse effects of the policies. In the discussion of the 1998 American Farmland Trust study, they say that 90% of the respondents said they experienced no loss in property values from zoning. Such survey responses are meaningless without knowing what fraction of the respondents were actually subject to zoning regulations and/or significant development pressure. This was a nationwide survey, and unlike high income coastal states such as New Jersey and Maryland, development pressure is still relatively light for the majority of the nation's farms. The Plantinga (2002) study finds less than 10% of the value of U.S. agricultural land nationwide is due to its development potential compared to 30% and 80% in Maryland and New Jersey respectively. A more balanced presentation is appropriate.

The literature review is spread through a few chapters and interspersed with a great deal of discussion of the national scene and detailed explanation of local policies in Maryland. While the background information is interesting, much of it is ancillary to the primary research question. The authors do a good job citing relevant published and unpublished empirical studies, but should provide more discussion of their methods and,

as mentioned above, draw a connection between these methodologies and their own statistical work. The following sections focus on the interviews and statistical analysis.

The interviews

The county interviews provide a rich background for understanding land use policy on the local level in Maryland. It is clear that there have been a number of complex and innovative land use policies that go well beyond zoning changes. For example, tradable development rights have been implemented in several jurisdictions. The report thoroughly reviews the complexity of local policies, and the interviews with local officials explain the historical and political context of policy changes.

This section of the report provides valuable background that can and should be utilized in designing the statistical analysis and interpreting its results. However, it is unclear how the interviews provide any objective evidence for or against the specific research questions. In order to draw objective conclusions about the effect of policies with a qualitative, interview approach, it is critically important that the interviews encompass the full range of individuals directly impacted by the policies. Although the report does not provide a full list of everyone interviewed, it appears that most interviews were with local government officials directly involved in the design and implementation of local land use policies. While this is adequate for background information, many of the respondents have a vested interest in the success of the policies. The interviews do not include any developers, homebuilders and others who are directly impacted and may have changed their actions as a result of development constraints.

Given the way the interviews were designed and reported, we don't believe it is appropriate to draw any conclusions about the research questions from the background information they provide. However, most of the final conclusions in the report were based on local government insights in the county interviews. Furthermore, the four specific conclusions drawn from local government interviews sometimes conflict with each other and often stray from the initial research questions and venture into policy recommendations and advocacy. For example, Conclusion 2 states:

> "While downzoning has been shown to have no impact on property values, other measures should be used as a complement to downzoning to mitigate perceived inequities between private rights and the public good. Among these measures are transferable development rights, purchase of development rights, the use of tax credits, leveraging, installment purchase agreements and State purchase and donation programs."

Since transferable development rights are sold, their price approximates an equilibrium price and not all farmers sell their rights, the fact that there is a positive price indicates that farmers only are willing to sell them if they are compensated for the value of the development rights. However, the authors' conclusion is that there is no loss in property value from restricting development rights, so these other policies that compensate landowners mitigate "perceived inequities" rather than compensate for actual losses.

Arguing that the government should compensate for "perceived" losses to reduce political opposition to downzoning is a policy advocacy position, not an objective conclusion that can be drawn from their research. In addition, Conclusion 3 states, "In those jurisdictions where downzoning appeared to be successful, there was development pressure occurring within the county that helped establish a value for agricultural lands…" If development pressure "establishes a value for agricultural lands," it is hard to argue that land values are not affected by reducing development rights.

The statistical analysis

The question of whether downzoning "maintains equity for the landowner," is best addressed through a statistical analysis of a large number of market transactions. To its credit, the Maryland study assembles a rich dataset and emphasizes the statistical approach. Unfortunately, the Before-After Control-Impact (BACI) and LOESS regression statistical methodologies they utilize have severe flaws in this application, and are not the best available statistical methods for assessing the impact of downzoning on property values. There is also a notable lack of connection between the statistical analysis and the rest of the report. The literature review, county interviews, and background research provide valuable information that should inform the design of the statistical research. However, in this case, there are a number of significant inconsistencies between sections of the report:

- There is no connection between the literature review and the statistical analysis. None of the studies discussed in the literature review utilize the BACI study design. Why do the authors not follow the regression based statistical techniques that are already established in the property value literature? Since they are taking a different approach, the report should contain a justification for this approach, and a criticism of the techniques in previous studies. The authors describe their approach, but fail to reconcile it with the existing literature on the issue.
- The summary of chapter 2 (page 11) contains a lengthy list of factors that affect land prices in addition to zoning, and emphasizes the need to control for the "context of the land." The importance of controlling for other factors is why most previous studies used a regression approach. The BACI statistical approach does not control for this context. As discussed later in this review, the nearest neighbor approach is not sufficient to control for these effects.
- In the county interviews in chapter 3, the authors discuss the numerous land preservation policies (e.g. tradable development rights, conservation easements, etc.) enacted in the counties in addition to downzoning. The use of these policies has increased over time, and is correlated with the adoption of downzoning. In Calvert County (one of the downzoned counties used for the statistical analysis), the report states that "a landowner can do just as well selling a development right as opposed to selling a portion of the farm for development." Despite the detailed description of these policies and their local significance, the report's statistical analysis does not control for the adoption of any land use policies except downzoning.

Maryland Property View is an excellent data set. The criteria used to select transactions for the statistical analysis is critically important. Many of the criteria used in the report (e.g. only arms-length transactions) are reasonable, but some of the criteria are overly restrictive. In particular, we feel that restricting the sample to parcels only in the agricultural zone is overly restrictive. They should include large parcels in rural residential zones as many of these properties have development and agricultural potential. This would increase their sample size and would provide control groups in addition to agricultural zones in other counties. The 20 acre minimum restriction may eliminate parcels likely to be used for development, so the authors should consider properties down to the minimum sizes impacted by downzoning. If part of the justification for the downzoning was to discourage development but parcels that are subject to development are not considered, this could influence the results. Given that the study period is more than 20 years, it is surprising that there are not more sales, and a larger sample size would help the statistical analysis. Several counties average about 3 sales per year, and this may be an indication that the screening is too stringent.

BACI (Before-After Control-Impact) design is a common statistical approach in ecological research, but has not been regularly used to study property values for decades. BACI was popular in the 1950s in transportation research. The interest then was in the effects of highways on property values. Researchers would examine the real estate sales of an area where a new highway was opened both before and after the highway was opened. These mean values would then be compared with the means in a control area away from the highway. Among the better known of such studies was by Adkins (1959) for three cities in Texas and Bone and Wohl (1959) in Massachusetts. In the years that followed, interest waned in such studies because improvements in computer capabilities and statistical methods allowed more refined techniques such as hedonic estimation.

BACI is essentially a comparison of the difference between means before and after an event. For example, an ecological researcher might observe a characteristic (e.g. soil moisture, the occurrence of an organism) over time for 2 sample plots, before and after some event that disturbs ecological conditions (a clearcut, hurricane, etc.). Key to this analysis is that the researcher observes the same sample plot in the before/after scenarios. In this study, the observations are property sales, and although the before/after sales take place within the same county, the before/after observations are different properties with very different characteristics. The attempts the authors make to control for these impacts (controlling for linear trend and nearest neighbor) are insufficient, and there really isn't an adequate solution within the BACI statistical framework, because the research question is far from a controlled experiment. In addition to random variation in the characteristics of observed properties, one would expect the zoning changes themselves (and time) to have an impact on the types of properties that are sold and thereby come into the before and after samples.

The time trend control is poorly designed. First, the paper assumes a linear growth in log(price/acre), but that is not typical of land markets. In another inconsistency within the report, an earlier section describes multi-year periods of stagnant land prices followed by periods of rapid price appreciation which directly conflicts with their

statistical assumption of constant growth in land prices. The time trend would be better controlled for by using annual dummy variables that allow the degree of appreciation to vary between years.

In addition, nearest neighbor matching is a poor control for location impacts. The only location characteristic it might adequately control for are distances from urban centers or other key locations. However, one would expect that time and downzoning would result in large land parcel transactions for development purposes taking place further and further from population centers over time. If this were true, the after parcels might be consistently further from urban centers than before parcels and skew the analysis. There are no statistical tests to rule out this possibility or even compare the basic characteristics of the before and after samples. Furthermore, location impacts are complex and may be based more on adjacencies than distance. In other words, if one were to take a matching approach, it is not clear that nearest neighbor is the best criterion for matching similar properties. For example, a 20 acre property adjacent to a busy highway is likely to have more in common with a 50 acre parcel next to the highway that is 10 miles away, than a 200 acre parcel that is 1 mile away from both the highway and the initial property. Finally, the matching approach greatly reduces the sample size, a substantial weakness acknowledged by the authors who consider the nearest neighbor analysis only an ancillary analysis because the small sample size greatly reduces the power of their statistical tests.

The second statistical methodology utilized is LOESS regression. They use LOESS to produced smoothed time trend graphs of average property values, and there are not statistical tests associated with the analysis. The graphs are featured in the body of the report and referred to as regression analysis. This is unfortunate, because the graphs are visually deceptive, and LOESS is not the type of regression analysis with which most people are familiar and that we recommend in the final section. We do not feel the LOESS regressions provide any useful insight to the research question.

LOESS regression fits simple models (linear or low-degree polynomials) to localized subsets of the data using weighted least squares. For each data point (year in the current study, apparently) the regression uses weights that decrease with distance measured in time. In order to understand the model that generated the results, one would need to know more information such as: the "bandwidth," the amount of data used for each sub-regression; the degree of the polynomials; and the specific weighting function. Without this information, it is difficult to evaluate the estimation. The jaggedness of the graphs suggests a narrow bandwidth with little smoothing.

Generally LOESS is data-intensive, needing large datasets so that there are many observations near each point. This is not the case here as there are very few sales in each county in a given year. It is also prone to outliers which may be the case here. The graphs provided are misleading because the vertical axis (cost per acre) is plotted on a logarithmic scale. One tends to look at the graphs as representing actual appreciation or depreciation without adjusting for the log scale. The log scale (where the $900 gap between $100 and $1000 has the same vertical distance as the $90,000 gap between

$10,000 and $100,000) hides the unstable and imprecise nature of the estimates. When one controls for the log scale, the variations in the cost per acre seem far too high, and sometimes the results seem contrary to the reports conclusions. Since the researchers only present their results graphically, the calculations here are very rough but they are indicative. In Calvert County in 1999 at the time of the downzoning, the price index is roughly $12,500 per acre. By about 2001, it had fallen to less than $3,000 per acre. During the same period, prices in Charles County went from roughly $1,150 to about $1,075 per acre. Visually, they appear to be similar decreases because the difference is obscured by the log scale. Surprisingly, page 37 of the report states, "Since the downzoning action, land costs in both counties (Charles and Calvert) have been relatively constant." The report authors seem to be deceived by their own graph, as they report a roughly 75% ($9,000) drop in per acre land values in Charles to be similar to a 5-10% (less than $1000) decrease in Calvert county over the same period. We do not believe the LOESS results are credible or useful, but this just indicates that the graphs must be approached with great care.

Summary

The panel finds the Maryland study's analysis to be insufficient to support their conclusion that downzoning has no negative impact on property values. Some of the more significant shortcomings include:

- The literature review is disconnected from the rest of the report, and fails to inform and support the analysis sections.
- The interviews did not include the full range of individuals impacted by downzoning, and do not provide any objective evidence towards zoning impacts on property values.
- The criteria applied to include properties in the statistical analysis appear to be overly restrictive, limiting the sample size and possibly skewing the results.
- The BACI statistical analysis does not control for many property characteristics (e.g. parcel size, location) that impact land values. Because some of these characteristics are likely to be correlated with zoning, this could lead to incorrect estimates of the downzoning impact.
- LOESS regression is a poor statistical technique for this application, and produces visually deceptive graphs that are heavily relied upon in the study conclusions.

Review of the New Jersey Study

The New Jersey study is titled "The Impact of Downzoning on Agricultural Land Value in New Jersey." The New Jersey study was completed in November 2004 by Michael Samuels of Clarion/Samuels Associates in cooperation with the New Jersey Farm Bureau. Their methodology includes a literature review, a review of State Agriculture Development Committee (SADC) appraisals, an analysis of tax assessor valuation practices, and two models developed by Clarion/Samuels Associates (Sales Comparison and Income Approaches).

The literature review provides a solid theoretical base for the paper. They are correct to use the Plantinga (2002) paper to demonstrate that development value is exceptionally high, and argue that the negative impacts from downzoning are likely to be greater in New Jersey than other states. They discuss the possibility of positive property value impacts from downzoning found in other studies, but they fail to account for these affects in their quantitative analysis in following sections. The major problem with the literature review is the absence of previous micro-level empirical studies, in particular failing to discuss Henneberry and Barrows (1990) is a major oversight. The final paragraph of the review does contain a paragraph of criticizing the Maryland study which appeared a year earlier. Their review of the Maryland study quotes a few sentences that they feel describes the New Jersey situation. Interestingly, the quote is describing the Henneberry and Barrows (1990) paper they overlook in their own review, and refers to the possible positive impacts from downzoning which is overlooked in their quantitative models.

Unfortunately, the series of quantitative estimates that follow are not as strong as the literature review. At best, their estimates may be considered upper-bound estimates of the negative property value impacts from downzoning because of their singular focus on the development effect. Although based on well established real estate appraisal methods that are reliable in well-established markets with comparable sales, the New Jersey study develops its own methodologies that extend these methods in questionable ways. They provide no citations of previous studies that utilize similar approaches. Our evaluation is that their methods are unreliable and likely to overestimate the negative effect of downzoning on property values. The following sections provide a detailed assessment of each of the New Jersey studies' quantitative techniques.

Review of SADC Appraisals

Although interesting, this analysis is of limited value because the purchase of development rights programs it analyzes involve the complete elimination of development rights whereas downzoning restricts but does not totally remove development rights. The study correctly notes that the percentage loss in property values from PDRs would only be an upper-bound of downzoning impacts. However, we do not find these results convincing even as an upper-bound estimate.

In addition to the lack of comparability to downzoning, this analysis suffers from the use of appraisals rather than actual purchase prices. The easements involved in purchase of development rights programs are difficult to appraise because there are few comparable sales, and traditional appraisal techniques are ill-suited to partial interests in property. A number of recent media reports, for example a 2003 *Washington Post* series (Stephens and Ottaway 2003) have found that appraisals of conservation easements and development rights are inflated and have resulted in excessive payments and tax credits for some landowners. Two empirical studies of actual land sales in Maryland (Nickerson and Lynch 2001; Michael 2004) have found modest negative impacts from the presence of conservation easements that are lower than what is typically estimated in appraisals for the Maryland Department of Agriculture for similar programs.

There may be some potential to obtain market like estimates of these values by analyzing accepted and rejected offers (the offer prices are based on the appraisals). It appears that the authors only present data from accepted offers but it isn't clear. Further analysis of this data would be interesting, but it would be tangential to the downzoning questions due to the other concerns noted above.

Assessor Valuation Practices

This approach relies on the common empirical finding of a negative relationship between price per acre and the size of the lot. They use local tax assessor estimates of this relationship for their case studies. Their next step is to assume that the value of a tract of land is the sum of the value of the individual building lots that make up the land parcel, and this is where the approach can go wrong. This assumption is logically inconsistent with the empirical finding that price/acre is decreasing as acres increase that they use as the basis for the first step in their calculation. In other words, if their assumption that the value of land is the sum of the value of the lots is true, then it must follow that the relationship between price per acre and lot size is linear. The analysis is not valid, because only one of the two critical assumptions on which it is based can be true.

Sales Comparison Approach

This approach is similar to the Assessor Valuation Practices. The difference is that a Clarion/Samuels appraiser uses the sales comparison approach to estimate the value of a small lot (e.g. 3 acres) and large lot (e.g. 10 acres) within the case study area. As a result, it suffers from the same logical inconsistency of simultaneously assuming that 1) price/acre decreases in lot size, and 2) the value of large parcels is the sum of the value of small lots.

The problems are compounded by uncertainty about the sales comparison themselves. Values are estimated based on small samples of 3 to 4 properties in each area, and no information is given about how or why specific properties were selected, so the selection method is a black-box for the reader. This heavy reliance on the subjective assessment of the researchers to select comparables is undesirable in an objective

research report. Furthermore, it appears that the comparable sales were for lots with houses rather than vacant land. Usually sales comparisons would use comparables that were as similar as possible to the parcel being considered. This would mean vacant land sales of approximately 50 acres. Comparables for the hypothetical property with the downzoning would be more difficult to find since the hypothetical zoning doesn't exist.

Nearby communities where larger lot zoning does exist appeared to be excluded from several case studies, although these areas would probably offer the closest comparable sales. For example, the Franklin Township case study ignores the Pineland Zoning area with larger minimum lot sizes, and Monroe Township contains a variety of different zones but they only look at sales within a single zone. There is also a lack of discussion of public amenities or community open space within developments. For example, the Hillsborough Township case study discusses 2 developments, one of which has 1.25 acre lots that are significantly less than the 3 acre minimums in the current zoning. How is it that the Country Classics subdivisions builds homes on lots that are less than half the size required by zoning regulations? This suggests some type of cluster development with community space that adds value to the private lots even if it isn't part of the individual 1.25 acres. Without more information it is hard to conclude much, but it raises questions about the method of selecting comparables.

Income Approach

This process attempts to model calculations a developer might make in evaluating a 50 acre parcel for development. While this might provide a rough estimate of the maximum willingness-to-pay of one player in a market, it is not the same as a market price which results from the interaction of all potential buyers and sellers. Depending on the particular situation, a developer may be able to buy for less than this value or another type of buyer could have higher values for non-development uses. The calculations also depend on the same small sample of 3-4 transactions used in the Sales Comparison Approach to estimate the price of a small lot which raises the same issues discussed above.

An additional (and perhaps more important) problem with this approach is the string of questionable assumptions upon which the calculations are built. There are assumed values for a single family house (and lot) on a lot with the original acreage and another house (and lot) on a lot with the downzoned acreage. There were houses on the smaller size lot in the county, but there was a tremendous range in values. Apparently, they arbitrarily picked a price to use. There were not enough sales on the larger lot size, according to the report, so they assumed a house price. Then they assumed that the ratio of the lot value to the sales price was constant for both types of houses and calculated the lot value, although there is no theoretical or empirical justification given for such a strong assumption. If you assume a larger house on the larger lot, then a larger lot was worth more than the smaller one. However, in Monroe Township they assume that the house values on large and small lots were identical, and as a result they amazingly estimate the same value for a lot that is double in size. Obviously, if one sells half as many lots for the same price per unit, there is going to be a large reduction in the total value of sales.

In summary, this approach uses made-up property values for large lot homesites, then applies a series of calculations based on unjustified assumptions (such as constant ratio of home value to lot value) and rough estimates of development costs.

Summary

The panel believes the New Jersey study's methodology is insufficient to support their conclusions, and is likely to overstate the negative impact of downzoning on property values. Some of the more significant shortcomings include:

- The literature review is good, but fails to show any peer reviewed studies that extend standard appraisal techniques in a manner similar to this report.
- The SADC appraisals examine purchases of development rights that are not comparable to downzoning, and the development rights appraisals themselves are of questionable accuracy.
- The methodology focuses exclusively on estimating the negative development effect, and makes no provisions for estimating possible positive impacts from zoning.
- Many of the key assumptions in the analysis are questionable. In particular, several of the study's methodologies simultaneously make the contradictory assumptions that 1) the value of the large parcel is the sum of the value of the lots into which it can be subdivided (implying a constant relationship between price per acre and parcel size) and 2) the price per acre of undeveloped land is decreasing with parcel size as found in most empirical studies of property values.
- Estimates are based on a small sample of 3 properties selected by the appraiser, and the criteria used to select the properties are not transparent.

A Different Approach – Hedonic Price Analysis

The best approach for estimating the impact of downzoning on property values is a cross-sectional time-series hedonic price analysis. Hedonic price analysis is a regression based statistical approach that uses individual properties as the unit of observation utilizing a large sample of properties with different zoning that share a common real estate market. Hedonic price analysis is well established in the peer reviewed literature and is the approach most commonly employed in previous studies of zoning impacts. The regression model can control for the impact of location, individual property and neighborhood characteristics, and other land use policies. Rather than simply comparing two areas with different zoning, the hedonic model can simultaneously incorporate data from a wide range of different zones which allows for much larger data sets and more precise estimates of zoning impacts. Hedonic price analysis is also being used more frequently by professional appraisers where it is often referred to as the mass appraisal method.

A simple hedonic regression model would pool data on undeveloped land sales across multiple counties and zones within the same overall market. Developed parcels could also be used, but should be analyzed as a separate sample rather than pooled with undeveloped sales. The most straightforward regression model would use ln(price/acre) as the dependent variable and the following explanatory variables:

- Size of parcel
- Distance based location variables – such as distance to central business districts, highway interchanges, parks or other significant environmental amenities
- Type of Zoning (different zones could be controlled for with a set of 0/1 indicator or dummy variables)
- Land quality (e.g. soil quality, slope, type of cover such as forest, pasture, etc.)
- Time trend (indicator variables for each year rather than a linear trend)

Following the lead of Henneberry and Barrows (1990), the regression could be designed to allow the impact of zoning to vary based on key characteristics of the property (e.g. parcel size, location). This approach follows the idea that the impacts of zoning will vary for different landowners. For example, landowners closer to urban areas may have greater development value and have a greater negative impact from downzoning, whereas those landowners located further from urban areas may have smaller negative impacts and substantial positive impacts from limiting nearby development. If data are available, repeat sales analysis similar to that of Palmquist (1982) and Parsons (1992) could be used to better control for property specific characteristics. Although even a simple hedonic regression as described above is superior to the methods used in the Maryland and New Jersey studies, researchers should be careful of potential problems with hedonic estimation such as missing data on important property characteristics and the possibility of endogenous zoning (in other

words local zoning changes are likely to be stimulated by some of the same factors that affect property values) within the hedonic model. The following paragraphs describe some of these issues and techniques that can be employed to correct them.

As discussed above, the researcher may not have data available on all the characteristics that influence the value of the properties. This does not have to be a problem unless the omitted characteristics are correlated with the variable(s) of interest. Unfortunately, such correlations frequently exist and may bias the coefficient estimates. In controlled experiments, the researcher would control for such conditions in doing the experiment. Generally such controlled experiments are not possible in economics. Regressions are a means of controlling statistically for the variables that are important but are not the primary interest of the research. If the data are not available on those variables, other strategies have to be developed. Recently there has been considerable interest in economics in the use of "natural experiments." A natural experiment attempts to mimic a controlled experiment as closely as possible. The researcher tries to find observations that are as similar to each other as possible, but where some have and some have not been "treated" (i.e., differ in the variable of interest).

An early example of such a natural experiment is Black (1999). Sandra Black was interested in how important better schools were to parents. This question had previously been addressed by estimating what effect, if any, schools test scores had on residential property values. The previous studies regressed real estate sales prices on the characteristics of the houses and neighborhoods including a measure of school quality. The problem is that better schools are frequently associated with better neighborhoods, but not all the important attributes of neighborhoods are observable. The coefficient on the school quality may be capturing not only the value of school quality but also the value of unobserved neighborhood traits. Black used 175 neighborhoods, each of which was internally fairly homogeneous with respect to all traits except that an attendance district boundary transected it. The differences between neighborhoods could be large, as long as the individual neighborhoods were homogeneous. She regressed the price of houses on the characteristics of the structures, a series of dichotomous variables for the neighborhoods, and the test scores in the attendance districts. By limiting the observations to be close to district boundaries, she was controlling for unobservable neighborhood characteristics. She found significant, positive values for school quality, but the estimates were about half the size of those she obtained using the standard techniques. This demonstrated that correlated unobservable neighborhood characteristics could have a large effect on the results and should be controlled for. A similar methodology has been applied by Holmes (1998) to industry location decisions.

With rural land the problems of unobservable traits of the neighborhood or region of the state may be even more of a problem than in urban areas such as Black's. Both the levels and the changes in the value of those unobservable characteristics may affect the estimated coefficients on the downzoning variables of interest. Since the correlation could be positive or negative, the bias in the coefficients could be in either direction. One possibility that we propose is to utilize the natural experiments that are available in the data. It appears that in most of the counties where downzoning took place there were

agriculture zones and rural zones or similar differentiated zones. Properties near the dividing line between the two zones are probably subject to the same general influences. If the downzoning affects only the agricultural zone or affects the two zones differentially, there is a natural experiment. These natural experiments would be within a county. If necessary because of data limitations, the natural experiment could be for properties on either side of a county boundary, although one would need to control for tax and expenditure differences between the counties as well as the downzoning differences. The complexity of the downzoning policies and their timing would be greater than Black faced, but there should be opportunities to control for the unobservable characteristics and improve the estimates.

A third extension of the research would allow for the possibility that the zoning itself was endogenous. In other words, the characteristics of the property might affect whether or not it was included in the area to be downzone. This is a problem in evaluating many social programs. For example, in evaluating the success of job training programs, one can compare the success of participants to those who do not participate. If participation is completely random, this is fine. However, if choosing to participate is not random (the more typical case) then comparing the success of participants to non-participants confounds two effects: the training and the characteristics that lead to choosing the training. Now it is easy to control for the observable characteristics that affect the participation decision, but once again the unobservable characteristics are likely to be important. In this example, the treatment, which is endogenous, is job training. In the land zoning issue, the treatment is downzoning. We would like to know the effect of downzoning on the lands that are downzoned, but it is difficult to isolate that effect, particularly in cross-sectional analysis.

Most of the work addressing these issues has used one of two techniques: matching estimators and instrumental variable estimators. Because of the limitations on data in rural areas, the search for instruments may not be successful. Matching techniques such as propensity score might be more successful. Propensity score matching matches each treated property to the untreated properties that are most similar, where “similar” means closest in the probability of being downzoned. The logic here is related to the logic in the natural experiments described above.

One advantage in the current instance is that there are observations over time. If there were repeat sales of properties, it would be possible to implement a difference in differences estimator, which is closely related to the repeat sale estimator, a technique that has been used widely since the 1980s. A difference in differences estimator tracks both the treated and the untreated, both before and after the treatment. This would allow estimation of the effect of treatment on the treated. However, as described above, there are probably not enough repeat sales. Instead, it may be possible to combine the time-series, cross-section hedonic estimation with some form of matching to refine the estimates and approximate a difference in differences estimator.

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Appendix: The Panel of Reviewers

The three person panel consisted of Dr. Jeffrey Michael, Dr. Raymond Palmquist, and Dr. George Parsons, and is uniquely qualified to provide a rigorous, independent, and accessible review of this important public policy issue. All three have extensive expertise in property value studies, economics, and statistical methods, and have experience with rural land markets within the mid-Atlantic region. None of the panelists have received previous funding from the Maryland Center for Agro-ecology or the New Jersey Farm Bureau, and they are not employed by institutions that contribute funding, board members, or are otherwise connected to the sponsors of the previous studies.

Dr. Jeffrey Michael is Associate Dean of the Honors College and Associate Professor of Economics at Towson University. As the junior member of the panel, he served as a reviewer, coordinated the panel and the overall synthesis of the panel's findings into the final report. The two senior panelists took a leading role in the technical review of the studies and the description of an alternative methodology in the final section. Dr. Raymond Palmquist is Professor of Economics at North Carolina State University and is widely considered to be one of the world's leading experts in property value studies. Dr. George Parsons is Director of the Marine Studies Program and Professor of Economics at the University of Delaware where his well-regarded work in environmental economics has included property value studies within the region.

Attachment H-10.3

Cost of Community Services Studies

Prepared by

American Farmland Trust

August 2007

FARMLAND INFORMATION CENTER

FACT SHEET

COST OF COMMUNITY SERVICES STUDIES

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DESCRIPTION

Cost of Community Services (COCS) studies are a case study approach used to determine the fiscal contribution of existing local land uses. A subset of the much larger field of fiscal analysis, COCS studies have emerged as an inexpensive and reliable tool to measure direct fiscal relationships. Their particular niche is to evaluate working and open lands on equal ground with residential, commercial and industrial land uses.

COCS studies are a snapshot in time of costs versus revenues for each type of land use. They do not predict future costs or revenues or the impact of future growth. They do provide a baseline of current information to help local officials and citizens make informed land use and policy decisions.

METHODOLOGY

In a COCS study, researchers organize financial records to assign the cost of municipal services to working and open lands, as well as to residential, commercial and industrial development. Researchers meet with local sponsors to define the scope of the project and identify land use categories to study. For example, working lands may include farm, forest and/or ranch lands. Residential development includes all housing, including rentals, but if there is a migrant agricultural work force, temporary housing for these workers would be considered part of agricultural land use. Often in rural communities, commercial and industrial land uses are combined. COCS studies findings are displayed as a set of ratios that compare annual revenues to annual expenditures for a community's unique mix of land uses.

COCS studies involve three basic steps:

1. Collect data on local revenues and expenditures.
2. Group revenues and expenditures and allocate them to the community's major land use categories.
3. Analyze the data and calculate revenue-to-expenditure ratios for each land use category.

The process is straightforward, but ensuring reliable figures requires local oversight. The most complicated task is interpreting existing records to reflect COCS land use categories. Allocating revenues and expenses requires a significant amount of research, including extensive interviews with financial officers and public administrators.

HISTORY

Communities often evaluate the impact of growth on local budgets by conducting or commissioning fiscal impact analyses. Fiscal impact studies project public costs and revenues from different land development patterns. They generally show that residential development is a net fiscal loss for communities and recommend commercial and industrial development as a strategy to balance local budgets.

Rural towns and counties that would benefit from fiscal impact analysis may not have the expertise or resources to conduct a study. Also, fiscal impact analyses rarely consider the contribution of working and other open lands, which is very important to rural economies.

American Farmland Trust (AFT) developed COCS studies in the mid-1980s to provide communities with a straightforward and inexpensive way to measure the contribution of agricultural lands to the local tax base. Since then, COCS studies have been conducted in at least 128 communities in the United States.

FUNCTIONS & PURPOSES

Communities pay a high price for unplanned growth. Scattered development frequently causes traffic congestion, air and water pollution, loss of open space and increased demand for costly public services. This is why it is important for citizens and local leaders to understand the relationships between residential and commercial growth, agricultural land use, conservation and their community's bottom line.

The **FARMLAND INFORMATION CENTER** (FIC) is a clearinghouse for information about farmland protection and stewardship.
The FIC is a public/private partnership between the USDA Natural Resources Conservation Service and American Farmland Trust.

COST OF COMMUNITY SERVICES STUDIES

For additional information on farmland protection and stewardship contact the Farmland Information Center. The FIC offers a staffed answer service, online library, program monitoring, fact sheets and other educational materials.

www.farmlandinfo.org

(800) 370-4879

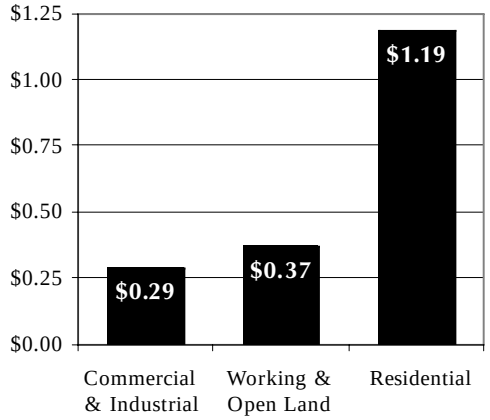
COCS studies help address three claims that are commonly made in rural or suburban communities facing growth pressures:

1. Open lands—including productive farms and forests—are an interim land use that should be developed to their "highest and best use."
2. Agricultural land gets an unfair tax break when it is assessed at its current use value for farming or ranching instead of at its potential use value for residential or commercial development.
3. Residential development will lower property taxes by increasing the tax base.

While it is true that an acre of land with a new house generates more total revenue than an acre of hay or corn, this tells us little about a community's bottom line. In areas where agriculture or forestry are major industries, it is especially important to consider the real property tax contribution of privately owned working lands. Working and other open lands may generate less revenue than residential, commercial or industrial properties, but they require little public infrastructure and few services.

COCS studies conducted over the last 20 years show working lands generate more public revenues than they receive back in public services. Their impact on community coffers is similar to that of other commercial and industrial land uses. On average, because residential land uses do not cover their costs, they must be subsidized by other community land uses. Converting agricultural land to residential land use should not be seen as a way to balance local budgets.

Median COCS Results



Median cost per dollar of revenue raised to provide public services to different land uses.

The findings of COCS studies are consistent with those of conventional fiscal impact analyses, which document the high cost of residential development and recommend commercial and industrial development to help balance local budgets. What is unique about COCS studies is that they show that agricultural land is similar to other commercial and industrial uses. In every community studied, farmland has generated a fiscal surplus to help offset the shortfall created by residential demand for public services. This is true even when the land is assessed at its current, agricultural use. However as more communities invest in agriculture this tendency may change. For example, if a community establishes a purchase of agricultural conservation easement program, working and open lands may generate a net negative.

Communities need reliable information to help them see the full picture of their land uses. COCS studies are an inexpensive way to evaluate the net contribution of working and open lands. They can help local leaders discard the notion that natural resources must be converted to other uses to ensure fiscal stability. They also dispel the myths that residential development leads to lower taxes, that differential assessment programs give landowners an "unfair" tax break and that farmland is an interim land use just waiting around for development.

One type of land use is not intrinsically better than another, and COCS studies are not meant to judge the overall public good or long-term merits of any land use or taxing structure. It is up to communities to balance goals such as maintaining affordable housing, creating jobs and conserving land. With good planning, these goals can complement rather than compete with each other. COCS studies give communities another tool to make decisions about their futures.

American Farmland Trust works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment.

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Colorado				
Custer County	1 : 1.16	1 : 0.71	1 : 0.54	Haggerty, 2000
Sagauche County	1 : 1.17	1 : 0.53	1 : 0.35	Dirt, Inc., 2001
Connecticut				
Bolton	1 : 1.05	1 : 0.23	1 : 0.50	Geisler, 1998
Durham	1 : 1.07	1 : 0.27	1 : 0.23	Southern New England Forest Consortium, 1995
Farmington	1 : 1.33	1 : 0.32	1 : 0.31	Southern New England Forest Consortium, 1995
Hebron	1 : 1.06	1 : 0.47	1 : 0.43	American Farmland Trust, 1986
Litchfield	1 : 1.11	1 : 0.34	1 : 0.34	Southern New England Forest Consortium, 1995
Pomfret	1 : 1.06	1 : 0.27	1 : 0.86	Southern New England Forest Consortium, 1995
Florida				
Leon County	1 : 1.39	1 : 0.36	1 : 0.42	Dorfman, 2004
Georgia				
Appling County	1 : 2.27	1 : 0.17	1 : 0.35	Dorfman, 2004
Athens-Clarke County	1 : 1.39	1 : 0.41	1 : 2.04	Dorfman, 2004
Brooks County	1 : 1.56	1 : 0.42	1 : 0.39	Dorfman, 2004
Carroll County	1 : 1.29	1 : 0.37	1 : 0.55	Dorfman and Black, 2002
Cherokee County	1 : 1.59	1 : 0.12	1 : 0.20	Dorfman, 2004
Colquitt County	1 : 1.28	1 : 0.45	1 : 0.80	Dorfman, 2004
Dooly County	1 : 2.04	1 : 0.50	1 : 0.27	Dorfman, 2004
Grady County	1 : 1.72	1 : 0.10	1 : 0.38	Dorfman, 2003
Hall County	1 : 1.25	1 : 0.66	1 : 0.22	Dorfman, 2004
Jones County	1 : 1.23	1 : 0.65	1 : 0.35	Dorfman, 2004
Miller County	1 : 1.54	1 : 0.52	1 : 0.53	Dorfman, 2004
Mitchell County	1 : 1.39	1 : 0.46	1 : 0.60	Dorfman, 2004
Thomas County	1 : 1.64	1 : 0.38	1 : 0.67	Dorfman, 2003
Union County	1 : 1.13	1 : 0.43	1 : 0.72	Dorfman and Lavigno, 2006
Idaho				
Canyon County	1 : 1.08	1 : 0.79	1 : 0.54	Hartmans and Meyer, 1997
Cassia County	1 : 1.19	1 : 0.87	1 : 0.41	Hartmans and Meyer, 1997
Kentucky				
Campbell County	1 : 1.21	1 : 0.30	1 : 0.38	American Farmland Trust, 2005
Kenton County	1 : 1.19	1 : 0.19	1 : 0.51	American Farmland Trust, 2005
Lexington-Fayette County	1 : 1.64	1 : 0.22	1 : 0.93	American Farmland Trust, 1999
Oldham County	1 : 1.05	1 : 0.29	1 : 0.44	American Farmland Trust, 2003
Shelby County	1 : 1.21	1 : 0.24	1 : 0.41	American Farmland Trust, 2005
Maine				
Bethel	1: 1.29	1 : 0.59	1 : 0.06	Good, 1994
Maryland				
Carroll County	1 : 1.15	1 : 0.48	1 : 0.45	Carroll County Dept. of Management & Budget, 1994
Cecil County	1 : 1.17	1 : 0.34	1 : 0.66	American Farmland Trust, 2001
Cecil County	1 : 1.12	1 : 0.28	1 : 0.37	Cecil County Office of Economic Development, 1994

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Frederick County	1 : 1.14	1 : 0.50	1 : 0.53	American Farmland Trust, 1997
Harford County	1 : 1.11	1 : 0.40	1 : 0.91	American Farmland Trust, 2003
Kent County	1 : 1.05	1 : 0.64	1 : 0.42	American Farmland Trust, 2002
Wicomico County	1 : 1.21	1 : 0.33	1 : 0.96	American Farmland Trust, 2001
Massachusetts				
Agawam	1 : 1.05	1 : 0.44	1 : 0.31	American Farmland Trust, 1992
Becket	1 : 1.02	1 : 0.83	1 : 0.72	Southern New England Forest Consortium, 1995
Deerfield	1 : 1.16	1 : 0.38	1 : 0.29	American Farmland Trust, 1992
Franklin	1 : 1.02	1 : 0.58	1 : 0.40	Southern New England Forest Consortium, 1995
Gill	1 : 1.15	1 : 0.43	1 : 0.38	American Farmland Trust, 1992
Leverett	1 : 1.15	1 : 0.29	1 : 0.25	Southern New England Forest Consortium, 1995
Middleboro	1 : 1.08	1 : 0.47	1 : 0.70	American Farmland Trust, 2001
Southborough	1 : 1.03	1 : 0.26	1 : 0.45	Adams and Hines, 1997
Westford	1 : 1.15	1 : 0.53	1 : 0.39	Southern New England Forest Consortium, 1995
Williamstown	1 : 1.11	1 : 0.34	1 : 0.40	Hazler et al., 1992
Michigan				
Marshall Twp., Calhoun County	1 : 1.47	1 : 0.20	1 : 0.27	American Farmland Trust, 2001
Newton Twp., Calhoun County	1 : 1.20	1 : 0.25	1 : 0.24	American Farmland Trust, 2001
Scio Twp., Washtenaw County	1 : 1.40	1 : 0.28	1 : 0.62	University of Michigan, 1994
Minnesota				
Farmington	1 : 1.02	1 : 0.79	1 : 0.77	American Farmland Trust, 1994
Lake Elmo	1 : 1.07	1 : 0.20	1 : 0.27	American Farmland Trust, 1994
Independence	1 : 1.03	1 : 0.19	1 : 0.47	American Farmland Trust, 1994
Montana				
Carbon County	1 : 1.60	1 : 0.21	1 : 0.34	Prinzing, 1997
Gallatin County	1 : 1.45	1 : 0.16	1 : 0.25	Haggerty, 1996
Flathead County	1 : 1.23	1 : 0.26	1 : 0.34	Citizens for a Better Flathead, 1999
New Hampshire				
Deerfield	1 : 1.15	1 : 0.22	1 : 0.35	Auger, 1994
Dover	1 : 1.15	1 : 0.63	1 : 0.94	Kingsley, et al., 1993
Exeter	1 : 1.07	1 : 0.40	1 : 0.82	Niebling, 1997
Fremont	1 : 1.04	1 : 0.94	1 : 0.36	Auger, 1994
Groton	1 : 1.01	1 : 0.12	1 : 0.88	New Hampshire Wildlife Federation, 2001
Stratham	1 : 1.15	1 : 0.19	1 : 0.40	Auger, 1994
Lyme	1 : 1.05	1 : 0.28	1 : 0.23	Pickard, 2000
New Jersey				
Freehold Township	1 : 1.51	1 : 0.17	1 : 0.33	American Farmland Trust, 1998
Holmdel Township	1 : 1.38	1 : 0.21	1 : 0.66	American Farmland Trust, 1998
Middletown Township	1 : 1.14	1 : 0.34	1 : 0.36	American Farmland Trust, 1998
Upper Freehold Township	1 : 1.18	1 : 0.20	1 : 0.35	American Farmland Trust, 1998
Wall Township	1 : 1.28	1 : 0.30	1 : 0.54	American Farmland Trust, 1998

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
New York				
Amenia	1 : 1.23	1 : 0.25	1 : 0.17	Bucknall, 1989
Beekman	1 : 1.12	1 : 0.18	1 : 0.48	American Farmland Trust, 1989
Dix	1 : 1.51	1 : 0.27	1 : 0.31	Schuyler County League of Women Voters, 1993
Farmington	1 : 1.22	1 : 0.27	1 : 0.72	Kinsman et al., 1991
Fishkill	1 : 1.23	1 : 0.31	1 : 0.74	Bucknall, 1989
Hector	1 : 1.30	1 : 0.15	1 : 0.28	Schuyler County League of Women Voters, 1993
Kinderhook	1 : 1.05	1 : 0.21	1 : 0.17	Concerned Citizens of Kinderhook, 1996
Montour	1 : 1.50	1 : 0.28	1 : 0.29	Schuyler County League of Women Voters, 1992
Northeast	1 : 1.36	1 : 0.29	1 : 0.21	American Farmland Trust, 1989
Reading	1 : 1.88	1 : 0.26	1 : 0.32	Schuyler County League of Women Voters, 1992
Red Hook	1 : 1.11	1 : 0.20	1 : 0.22	Bucknall, 1989
North Carolina				
Alamance County	1 : 1.46	1 : 0.23	1 : 0.59	Renkow, 2006
Chatham County	1 : 1.14	1 : 0.33	1 : 0.58	Renkow, 2007
Orange County	1 : 1.31	1 : 0.24	1 : 0.72	Renkow, 2006
Union County	1 : 1.30	1 : 0.41	1 : 0.24	Dorfman, 2004
Wake County	1 : 1.54	1 : 0.18	1 : 0.49	Renkow, 2001
Ohio				
Butler County	1 : 1.12	1 : 0.45	1 : 0.49	American Farmland Trust, 2003
Clark County	1 : 1.11	1 : 0.38	1 : 0.30	American Farmland Trust, 2003
Knox County	1 : 1.05	1 : 0.38	1 : 0.29	American Farmland Trust, 2003
Madison Village, Lake County	1 : 1.67	1 : 0.20	1 : 0.38	American Farmland Trust, 1993
Madison Twp., Lake County	1 : 1.40	1 : 0.25	1 : 0.30	American Farmland Trust, 1993
Shalersville Township	1 : 1.58	1 : 0.17	1 : 0.31	Portage County Regional Planning Commission, 1997
Pennsylvania				
Allegheny Twp., Westmoreland County	1 : 1.06	1 : 0.14	1 : 0.13	Kelsey, 1997
Bedminster Twp., Bucks County	1 : 1.12	1 : 0.05	1 : 0.04	Kelsey, 1997
Bethel Twp., Lebanon County	1 : 1.08	1 : 0.17	1 : 0.06	Kelsey, 1992
Bingham Twp., Potter County	1 : 1.56	1 : 0.16	1 : 0.15	Kelsey, 1994
Buckingham Twp., Bucks County	1 : 1.04	1 : 0.15	1 : 0.08	Kelsey, 1996
Carroll Twp., Perry County	1 : 1.03	1 : 0.06	1 : 0.02	Kelsey, 1992
Hopewell Twp., York County	1 : 1.27	1 : 0.32	1 : 0.59	The South Central Assembly for Effective Governance, 2002
Maiden Creek Twp., Berks County	1 : 1.28	1 : 0.11	1 : 0.06	Kelsey, 1998
Richmond Twp., Berks County	1 : 1.24	1 : 0.09	1 : 0.04	Kelsey, 1998
Shrewsbury Twp., York County	1 : 1.22	1 : 0.15	1 : 0.17	The South Central Assembly for Effective Governance, 2002
Stewardson Twp., Potter County	1 : 2.11	1 : 0.23	1 : 0.31	Kelsey, 1994
Straban Twp., Adams County	1 : 1.10	1 : 0.16	1 : 0.06	Kelsey, 1992
Sweden Twp., Potter County	1 : 1.38	1 : 0.07	1 : 0.08	Kelsey, 1994
Rhode Island				
Hopkinton	1 : 1.08	1 : 0.31	1 : 0.31	Southern New England Forest Consortium, 1995
Little Compton	1 : 1.05	1 : 0.56	1 : 0.37	Southern New England Forest Consortium, 1995
West Greenwich	1 : 1.46	1 : 0.40	1 : 0.46	Southern New England Forest Consortium, 1995

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Tennessee				
Blount County	1 : 1.23	1 : 0.25	1 : 0.41	American Farmland Trust, 2006
Robertson County	1 : 1.13	1 : 0.22	1 : 0.26	American Farmland Trust, 2006
Tipton County	1 : 1.07	1 : 0.32	1 : 0.57	American Farmland Trust, 2006
Texas				
Bandera County	1 : 1.10	1 : 0.26	1 : 0.26	American Farmland Trust, 2002
Bexar County	1 : 1.15	1 : 0.20	1 : 0.18	American Farmland Trust, 2004
Hays County	1 : 1.26	1 : 0.30	1 : 0.33	American Farmland Trust, 2000
Utah				
Cache County	1 : 1.27	1 : 0.25	1 : 0.57	Snyder and Ferguson, 1994
Sevier County	1 : 1.11	1 : 0.31	1 : 0.99	Snyder and Ferguson, 1994
Utah County	1 : 1.23	1 : 0.26	1 : 0.82	Snyder and Ferguson, 1994
Virginia				
Augusta County	1 : 1.22	1 : 0.20	1 : 0.80	Valley Conservation Council, 1997
Bedford County	1 : 1.07	1 : 0.40	1 : 0.25	American Farmland Trust, 2005
Clarke County	1 : 1.26	1 : 0.21	1 : 0.15	Piedmont Environmental Council, 1994
Culpepper County	1 : 1.22	1 : 0.41	1 : 0.32	American Farmland Trust, 2003
Frederick County	1 : 1.19	1 : 0.23	1 : 0.33	American Farmland Trust, 2003
Northampton County	1 : 1.13	1 : 0.97	1 : 0.23	American Farmland Trust, 1999
Washington				
Okanogan County	1 : 1.06	1 : 0.59	1 : 0.56	American Farmland Trust, 2007
Skagit County	1 : 1.25	1 : 0.30	1 : 0.51	American Farmland Trust, 1999
Wisconsin				
Dunn	1 : 1.06	1 : 0.29	1 : 0.18	Town of Dunn, 1994
Dunn	1 : 1.02	1 : 0.55	1 : 0.15	Wisconsin Land Use Research Program, 1999
Perry	1 : 1.20	1 : 1.04	1 : 0.41	Wisconsin Land Use Research Program, 1999
Westport	1 : 1.11	1 : 0.31	1 : 0.13	Wisconsin Land Use Research Program, 1999

Note: Some studies break out land uses into more than three distinct categories. For these studies, AFT requested data from the researcher and recalculated the final ratios for the land use categories listed in this table. The Okanogan County, Wash., study is unique in that it analyzed the fiscal contribution of tax-exempt state, federal and tribal lands.

American Farmland Trust's Farmland Information Center acts as a clearinghouse for information about Cost of Community Services studies. Inclusion in this table does not necessarily signify review or endorsement by American Farmland Trust.

Attachment H-10.4

Proposed General Plan Update
Evaluation of Potential for Decrease in Market Value – Parcels Subject to "Down-Zoning"

Prepared by

Keyser Marston Associates

October 2010

KEYSER MARSTON ASSOCIATES
ADVISORS IN PUBLIC/PRIVATE REAL ESTATE DEVELOPMENT

MEMORANDUM

To: Devon Muto, Chief, Advance Planning
County of San Diego

From: Keyser Marston Associates, Inc.

Date: October 7, 2010

Subject: Proposed General Plan Update - Evaluation of Potential for Decrease in Market Value - Parcels Subject to "Down-Zoning"

Pursuant to your request, Keyser Marston Associates, Inc. (KMA) has completed an analysis of the potential for negative impacts on property values due to selective “down-zoning” under the proposed General Plan Update. The analysis uses a statistical approach, which we believe can provide the most objective examination of this issue.

Background

Under the proposed General Plan Update, certain areas of the County would experience “down-zoning,” or a decrease in the number of residential units allowed while others would be “up-zoned,” or the number of units allowed would be increased. As we understand it:

- Up-zoned areas are primarily in the western portion of the unincorporated area and/or within close proximity to established communities.

- Down-zoned areas tend to be outside established communities and in some cases are even inaccessible by road (though this is not uniformly the case).

Summary of Findings

The analysis does not indicate a negative impact to property values as a result of the proposed selective down-zoning. A statistical approach was used to examine whether land value is related to the number of buildable units in the areas of the County that would be down-zoned. In some parts of the unincorporated area, no relationship was found between land value and the number of buildable units. In other parts of the unincorporated

area, land values were actually found to be *higher* for properties with fewer buildable units. In no case do the results indicate a negative impact on property value as a result of the proposed down-zoning. See Table 1 (page 4) for additional details.

The finding that down-zoning would not have a negative impact on property value appears to be driven by the nature of the areas proposed for selective down-zoning. We would only expect to find a negative impact on land value from the proposed down-zoning to the extent construction of new residential units is reasonably anticipated to be feasible from a market perspective within a foreseeable time horizon. However, the properties selected for down-zoning are generally outside of established communities and sometimes lack road access or may otherwise be constrained in the potential to support residential development by site conditions or lack of market demand. Existing land values in these areas are already relatively low - indicative of the constraints that exist. As shown on Table 2, average land values in the areas selected for down-zoning average from 1/3 to less than 1/10th of those in other areas.

While on an aggregate basis our analysis does not identify a negative impact to land value; this finding cannot be generalized to every individual parcel. The potential for negative impacts to specific individual properties cannot be precluded based on this analysis. The analysis cannot account for every unique circumstance.

Approach

The evaluation is based on a recognized and accepted statistical technique for analyzing questions of property valuation known as a “hedonic pricing analysis” (described further below). The technique is designed to examine how various characteristics of a property affect its market value. The analysis results indicate which characteristics of a property affect its market value and which do not. The relative importance of different property characteristics to market value can also be understood and quantified. The principal data set for the analysis consists of all land sale transactions that have occurred within the areas proposed for down-zoning over the past five years.

So that differences between areas of the County could be understood, the unincorporated area was grouped into four broad geographic classifications shown in the table below[1]. Each geographic grouping was analyzed separately.

Geographic Groupings of Community Planning Areas for Analysis Purposes

Desert	Eastern Unincorporated Area	Western Unincorporated Area	
		Northern Portion	Southern Portion
Desert	Alpine	Fallbrook	Crest-Dehesa
	Central Mountain	North County Metro	Lakeside
	Jamul-Dulzura	Pendleton-De Luz	Spring Valley
	Julian	Rainbow	Sweetwater
	Mountain Empire	Ramona	Valle de Oro
	North Mountain	San Dieguito	
	Otay	Valley Center	
	Pala-Pauma		

[1] The County Islands of Mira Mesa, Greenwood, and Lincoln Acres have been excluded from this analysis. Mira Mesa is occupied by Scripps Miramar Saddlebreds. Greenwood consists of the County of San Diego's jurisdictional boundary of the Greenwood Cemetery. Lincoln Acres is characterized by the La Vista Cemetery and existing residential lots.

Table 1
Summary of Analysis Results
Analysis of Property Value Impacts
San Diego County General Plan Update
San Diego County, CA **October 7, 2010**

	Desert Sub region	Eastern Unincorporated Area [2]	Western Unincorporated Area [2]	
			Northern Portion	Southern Portion
Negative Impact on Land Value Indicated?	No	No	No	No
Relationship Between Buildable Units and Price of Land				
Was a relationship found between number of buildable units and price of land in the areas proposed to be down-zoned? [1], [3]	Yes, a Statistically Significant Relationship Was Found	No Statistically Significant Relationship was found	No Statistically Significant Relationship was found	Yes, a Statistically Significant Relationship Was Found
Nature of Relationship Found	Land Value Goes Up as Number of Buildable Units Goes Down	No Relationship	No Relationship	Land Value Goes Up as Number of Buildable Units Goes Down
Statistical Analysis Metrics				
P-value: buildable units per acre [3]	0.01	0.11	0.89	0.03
Coefficient (if significant / p<.05)	(15.9)	N/A	N/A	(6.6)
Significant Model	Yes	Yes	Yes	Yes
F-statistic	6.3E-12	4.3E-24	1.5E-14	5.2E-05
Variation explained by statistical model (Adj. R-Squared) [4]	18%	35%	30%	36%
	Other factors not accounted for in the model explain balance of variation			

Notes

(1) Both buildable units and price were converted to a per acre basis for purposes of analysis. Number of buildable units per acre is reflective of regulatory and physical constraints that would presumably be considered by buyer and seller in a land transaction including steep slopes, sensitive habitat, water, road access, and others. Sale prices are derived from County data on property sales and are assumed to represent full cash value of properties. See page 8 for further description.

(2) See page 3 of text for identification of planning areas falling into each major geographic grouping.

(3) A statistically significant relationship is indicated when the "p-value" is less than 0.05. The p-value indicates the probability that the relationship found in the data is explained by "random chance." A p-value less than .05 indicates there is less than a 5% probability that the relationship found is due to "random chance."

(4) The approach is to create a model which identifies relationships between land sale price and property characteristics including parcel size, year of sale, number of buildable units, and others. The "variation explained by statistical model" (or adjusted R Squared) indicates how much of the overall variation in land sale price found in the data can be explained by the property characteristics that were analyzed. Due to data limitations, many factors potentially affecting land value could not be taken into account - for example distance to employment centers, amenities, and services, soil quality, and many others. As a result, a relatively low percentage of the variation in land sale price is explained by the model.

Prepared by Keyser Marston Associates, Inc.
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Table 2
Summary of Land Sale Transaction Data
Analysis of Property Value Impacts
San Diego County General Plan Update
San Diego County, CA **October 7, 2010**

Data Set Land Sale Transactions over Past Five Years [1]	Desert Sub region	Eastern Unincorporated Area	Western Unincorporated Area Northern Portion	 Southern Portion	Total
Number of Transactions					
Areas either un-affected or proposed to be "up-zoned"	103	118	341	81	643
Areas proposed to be "down-zoned"	210	300	224	36	770
Total	313	418	565	117	1,413
Average Parcel Size in Acres					
Areas either un-affected or proposed to be "up-zoned"	5 acres	6 acres	6 acres	3 acres	6 acres
Areas proposed to be "down-zoned"	15 acres	20 acres	13 acres	18 acres	17 acres
Existing Land Values (Average Sale Price Per Acre)	***Note: these represent existing values under the existing General Plan***				
Areas either un-affected or proposed to be "up-zoned"	$15,700 /acre	$37,800 /acre	$118,600 /acre	$191,200 /acre	$91,300 /acre
Areas proposed to be "down-zoned"	$4,500 /acre	$10,200 /acre	$28,700 /acre	$17,700 /acre	$13,400 /acre
Ratio: Existing land value in un-affected & up-zoned areas vs. existing value in areas proposed to be "down-zoned"	3 : 1	4 : 1	4 : 1	11 : 1	7 : 1

Note: See text for identification of planning areas falling into each major geographic grouping.

Note
(1) Sale transactions in which sale price and acreage could not be identified have been excluded. Sale transactions for parcels with commercial or industrial land use designations are also excluded.

Source: County of San Diego - database on property sale transactions.

Prepared by Keyser Marston Associates, Inc.
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While our analysis is grounded in an accepted approach, there are many factors affecting land value that could not be accounted for using the data that was readily available to us. A notable limitation is the lack of geographic-based variables. For example, proximity to employment centers, freeways, amenities, services, or the ocean. Other factors include whether a property is needed for a site assembly (which can result in a premium being paid), whether special assessments or charges will be due (which can reduce the price), soil conditions, vegetation, presence of environmental contamination, and natural features. All of these factors likely affect property value but could not be accounted for based on the data set available to us. This is reflected in the low percentage of overall variation in the price of land explained by the specific property characteristics included in the analysis (see Table 1). The low percentage of variation in land price that is explained does not invalidate the findings with respect to property value impacts; rather, it is indicative of the many other factors influencing property values that are not accounted for (as described above). Despite these limitations, the analysis does offer an evaluation that is calibrated to the specific matter in question and the specific conditions affecting property value in unincorporated San Diego County and we believe the results to be informative.

Additional description of technical methodology and model specifications are provided below.

Factors Influencing Property Value Impacts of Down-zoning

Down-zoning, and the resulting impact on property values (if any), depend heavily on market and physical conditions affecting the properties. While down-zoning restricts the number of buildable units on a given property, this would only be expected to negatively impact value to the extent construction of the units would have been reasonably anticipated to be feasible from a market perspective within a foreseeable time horizon. Down-zoning also has the potential to create value for landowners if, for example, it protects environmental or physical characteristics of the area which are valued in the marketplace for land. As stated by Michael, Palmquist, and Parsons (Michael et. al):

> “Economic theory does not give a clear answer on whether downzoning should decrease or increase property values. First, downzoning can negatively impact property values because it puts a constraint on development opportunities. This negative impact could be large for properties with great development potential. However, downzoning could also have several positive impacts that offset the loss of development opportunities. The positive effects could include the enhanced environmental and landscape amenities valued by buyers, protecting a critical mass of farms in the local agricultural community, and the viability of non-development land

> uses, reduced burdens on local government services such as schools and roads, and reduced uncertainty about future land use. Which of these offsetting effects dominates is an empirical question, and the magnitude of the effects will vary between markets and individual properties within the same market."[2]

Description of Technical Methodology and Model Specifications

This section provides additional technical information about the approach used in the analysis.

Statistical Approach

KMA utilized a simple hedonic price analysis to estimate the effect of down-zoning on property values in unincorporated San Diego County. Hedonic price analysis is well regarded by experts and is a common analytical approach for evaluating impacts on property values. The basic premise is that the value of land is related to the characteristics of the property and potential uses. A hedonic price analysis looks at how prices are affected by property characteristics using a common statistical technique known as multivariate regression. The output of the analysis can be used to determine if there is a relationship between each individual property characteristics and the price of land.

Data

The data source utilized for the analysis is San Diego County Assessor data on sales of vacant, undeveloped, and agricultural land for the past five years across 21 Community/Subregional Planning Areas in unincorporated areas of San Diego County.[3] The Assessor's parcels are the unit of analysis. Only land sales in the areas proposed for down-zoning were included in the data set so that the analysis is reflective of the factors affecting land valuation in these areas to the greatest extent possible.

Variables Reflected in Analysis

Our analysis incorporates the following variables selected in part based upon the recommendations in an article by Michael et. al.[4]:

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[2] Michael, J., Palmquist, R., Parsons, G. "Downzoning and Rural Land Markets: A review of two recent studies in Maryland and New Jersey." Submitted to the Maryland Center for Agro-Ecology, Inc. July 2006.
[3] The Planning areas of Otay and County Islands are not included in the Analysis.
[4] Michael, J., Palmquist, R., Parsons, G. "Downzoning and Rural Land Markets: A review of two recent studies in Maryland and New Jersey." Submitted to the Maryland Center for Agro-Ecology, Inc. July 2006.

- Dependent Variable:
  - *Ln (price per acre)* – Land sale data was "normalized" to a price per acre and then "transformed" with the natural log consistent with the methodology recommend by Michael et. al.[5] This is a typical approach when working with pricing data in an analysis of this nature.

- Explanatory (Independent) variables / property characteristics:
  - *Effective Units Per Acre* – Since we are interested in understanding the effect of down-zoning on land prices, the variable of interest needed to capture variations in the level of development allowed by different zoning designations. This variable represents the effective yield in terms of residential units per acre taking into account factors such as road access, steep slopes, and sensitive habitat. It is designed to mirror as closely as possible the total regulatory and physical constraint on the number of buildable units that would potentially be taken into consideration by buyers and sellers of land in a transaction. The effective units per acre was provided by County staff based on a Geographic Information Systems analysis accounting for the following specific factors[6]:
    - Units permitted under the existing General Plan (as well as the Groundwater Ordinance and Groundwater Limitations Map)
    - Slope
    - Presence of sensitive habitat which require mitigation
    - Presence of wetlands and floodways
    - Travel-time from a recognized, fully staffed fire station
    - Distance from a Publicly maintained road
    - Designation of the Forrest Conservation Initiative
  - *Size of parcel* – in acres
  - *Community Planning Area* – Indicator variables for each of the community planning areas.
  - *Agricultural land identifier* – indicator variable for whether the property is currently used for agriculture according to San Diego Association of Governments (SANDAG).
  - *Time Trend* – indicator variables for each year

[5] Same as above
[6] More details about how each of these factors affect the potential for development can be found at http://www.sdcounty.ca.gov/dplu/gpupdate/docs/TDR_06182010_b.pdf

Attachment H-10.5

Fiscal Impact Analysis Findings and Supporting Technical Tables: Residential Development / County General Plan Update Hybrid Scenario

Prepared by

Keyser Marston Associates

October 2010

KEYSER MARSTON ASSOCIATES
ADVISORS IN PUBLIC/PRIVATE REAL ESTATE DEVELOPMENT

MEMORANDUM

To: Devon Muto, Chief, Advance Planning
County of San Diego

From: Keyser Marston Associates, Inc.

Date: October 7, 2010

Subject: Fiscal Impact Analysis Findings and Supporting Technical Tables
Residential Development / County General Plan Update Hybrid Scenario

In accordance with your request, Keyser Marston Associates, Inc. (KMA) has prepared an analysis of fiscal impacts generated by residential development under the General Plan Update Hybrid Scenario ("Update") for unincorporated areas of the County outside the County Water Authority (CWA) boundary excluding the Desert sub-region. The analysis addresses the County General Fund and a representative composite of fire districts serving the area. This memo summarizes the findings of the analysis and includes a complete set of supporting technical tables. A discussion of the likely fiscal impacts under the existing General Plan compared to the proposed General Plan Update is also provided.

Our full report, which will provide further explanation of key assumptions, is forthcoming.

Summary of Findings

The analysis indicates recurring annual revenues and expenses to the County's General Fund and the fire districts as follows:

Projected Annual Recurring Revenues and Expenses Upon Build Out	**County General Fund**	**Fire Districts** (representative composite)	**County and Fire Districts Combined**
Marginal Annual Revenue	$9.1 million	$2.2 million	$11.3 million
Marginal Annual Expense	($9.4 million)	($3.3 million)	($12.7 million)
Net Marginal Annual Expense	($0.3 million)	($1.1 million)	($1.4 million)

Note: all amounts are in current dollars

The analysis indicates residential development within the subject planning areas under the General Plan Update would be approximately fiscally neutral to the County's General Fund. County General Fund revenue is projected to be within about $300,000 (or 4%) of expenses upon full build out.

In contrast, fire districts serving the subject planning areas are projected to experience an aggregate fiscal deficit in the range of $1.1 million annually upon full build out. There are a number of fire districts that provide service in the unincorporated area. The analysis results represent impacts to a "representative composite" of fire districts serving the area derived based on specific data obtained for Alpine and San Diego Rural Fire Protection Districts. These districts combined represent about 70% of total population growth projected for the subject planning areas.

The combined net annual expense of $1.4 million annually equates to $161 per residential unit. Or, for every $1 dollar in projected revenue generated by the new residential development there is $1.12 in projected expenses inclusive of both the County General Fund and the fire districts.

A key driver of the analysis is the assumption that new residential development would be primarily focused within areas served by existing infrastructure and facilities based upon our understanding of the policies outlined in the Draft General Plan. As a result, the analysis does not incorporate significant fixed facility operations and maintenance (O&M) costs such as new fire station(s). Fixed facility O&M costs would be a factor if, for example, significant residential development were assumed to occur outside the area served by existing fire stations, triggering the need for additional stations in order to provide an acceptable response time.

The generalized fire district analysis reflects the community facilities district (CFD) that is in place within the San Diego Rural Fire protection district and which provides additional funding for fire protection through imposition of a special tax applicable to new subdivisions. Although, we understand efforts are currently underway to establish similar CFDs elsewhere in the County, we have not assumed the additional funding for fire services that could potentially be made available if such a district is adopted. If a similar special tax to San Diego Rural's were imposed elsewhere in the County, approximately $1 million in additional revenue could be available to fund fire protection. This specific revenue assumption would make the fire districts approximately fiscally neutral on an aggregate basis by reducing the projected overall net annual expense for fire protection from $1.1 million down to $0.1 million annually.

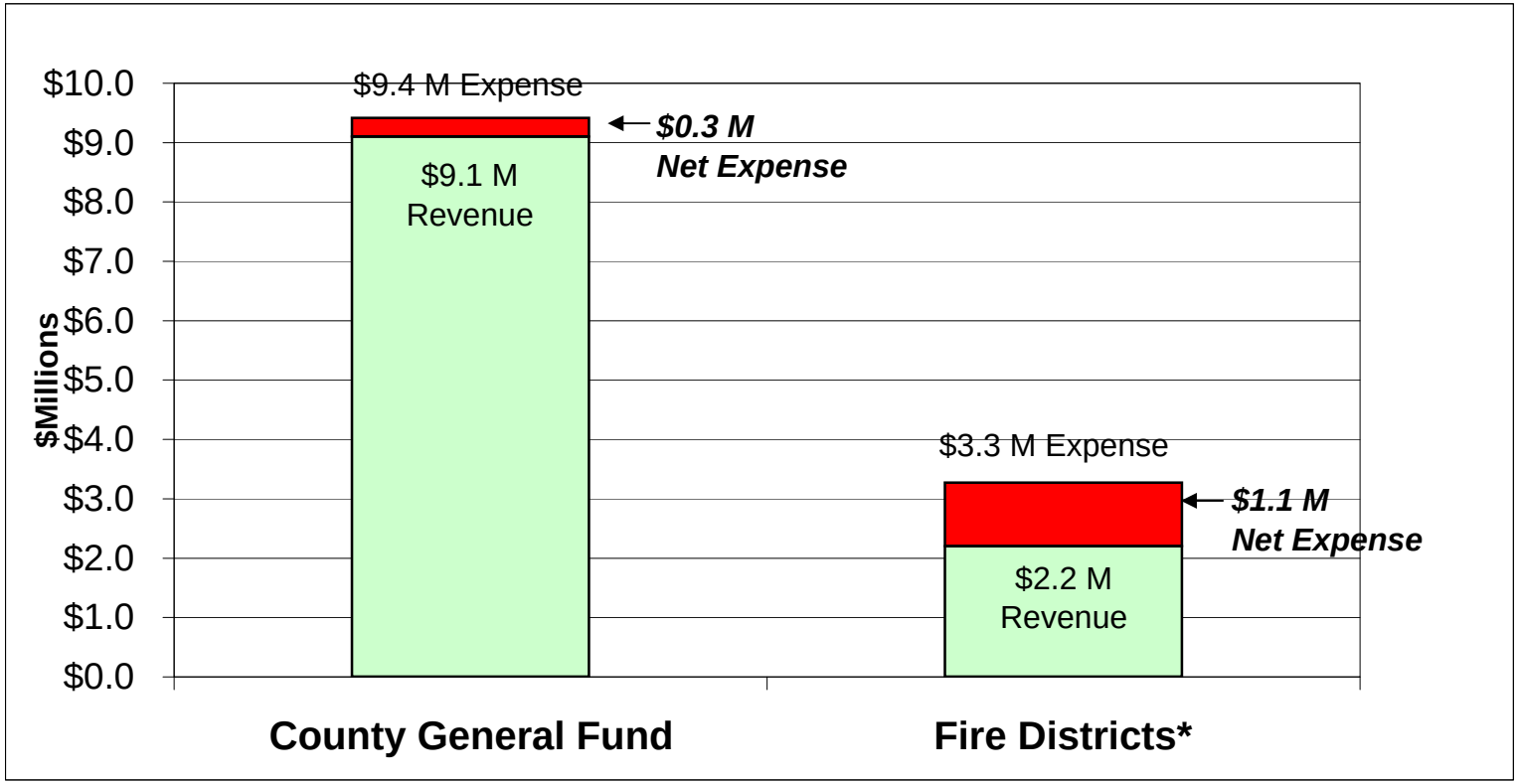
The generalized approach to the fire district analysis did not include a detailed examination of how specific fire stations may be impacted, whether capacity exists to

absorb additional calls for service at some stations without additional staff equipment costs, or whether modifications to existing service models would be necessary at some stations (such as conversion from volunteer to career staffing).

The results of this fiscal impact analysis reflect a high-level yet thorough review of all major revenue and cost assumptions by representatives of the various County departments. This review has been critical to producing an analysis which reflects the County's cost structure and expectations regarding the manner in which services would be deployed to serve new population.

The analysis focuses exclusively on the annual impacts of additional residential development permitted under the General Plan Update. We have not evaluated or included revenue and service cost impacts associated with future commercial development that would be permitted under the Update. Based on our experience, the non-residential components would likely generate revenues in excess of services costs, which would at least partially off-set the negative impacts of the residential units.

EXHIBIT A
RECURRING ANNUAL GENERAL FUND AND FIRE DISTRICT IMPACTS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**



* Represents a composite of the Fire Districts serving the subject planning areas within the portion of the unincorporated area outside the County Water Authority boundary, excluding the Desert sub-region.

Prepared by: Keyser Marston Associates, Inc.
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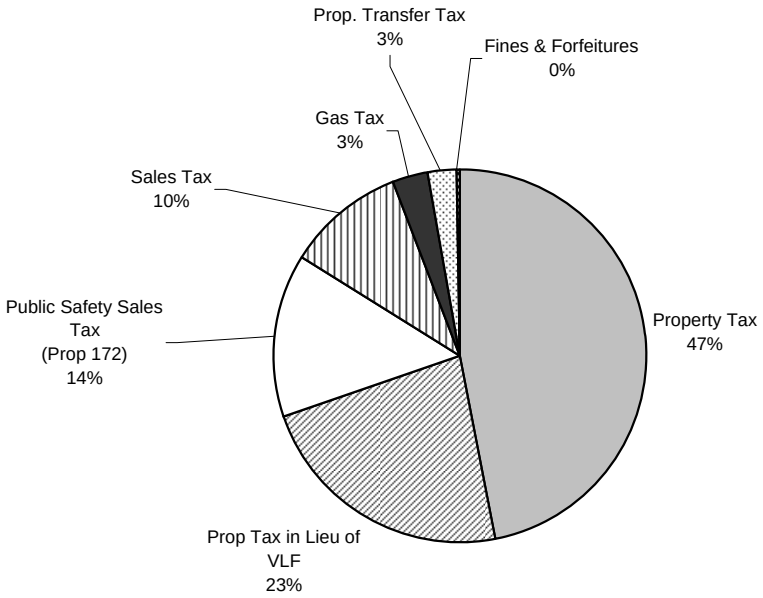
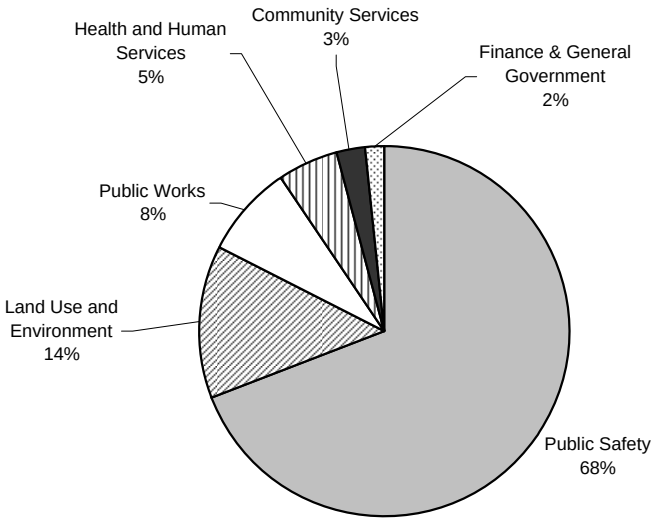
EXHIBIT B

COMPOSITION OF ANNUAL COUNTY GENERAL FUND REVENUES AND EXPENSES AT BUILDOUT[1]
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

COUNTY GENERAL FUND REVENUES[1]
Total Revenues: $9.1 Million



COUNTY GENERAL FUND EXPENSES[1]
Total Expenses: $9.4 Million



[1] Plus non-General Fund Public Works expenses and Gas Tax Fund revenues.

Prepared by: Keyser Marston Associates, Inc.
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Fiscal Impacts of Residential Development: Proposed General Plan Update vs. Existing General Plan

Although not the primary focus of the analysis, the results also provide insight into the fiscal impacts that would likely be experienced if growth were to proceed in accordance with the existing General Plan. The following is a comparative discussion of fiscal impacts likely with the Existing General Plan versus the proposed Update in the unincorporated areas of the County outside the County Water Authority boundary excluding the Desert sub-region.

Background: Existing General Plan Land Use Policy Compared to General Plan Update

We understand that there are some key differences in land use policy between the existing General Plan and the proposed General Plan Update that are relevant to an evaluation of fiscal impacts:

- The existing General Plan permits a greater total number of residential units than the proposed General Plan Update; however, not all the units permitted "on paper" under the existing General Plan are feasible due to other regulatory and physical constraints (i.e. steep slopes, sensitive habitat, water availability, road access).

- KMA has been advised that the net decrease in the number of *feasible* units (feasible from a regulatory and physical standpoint) with the proposed General Plan update is in the range of 7,500 units.

- We understand the net reduction in feasible units would occur through a combination of selective "up-zoning" and "down-zoning." Areas to be "down-zoned" are generally outside of established communities and not well served by existing infrastructure and facilities.

- Compared to the proposed Update, the Existing General Plan permits more units outside of the areas served by existing infrastructure and fewer units in areas which are well served.

Likely Fiscal Impacts: Existing General Plan Compared to Update

Our expectation is that fiscal deficits that would be experienced with build out of the Existing General Plan would be greater than for the proposed General Plan Update to both the County General Fund and the fire districts. This expectation is based upon the following:

1. The existing General Plan permits more residential units - Revenues and expenses are generally proportional to the amount of residential development that occurs. Therefore, with increased residential development, the magnitude of the fiscal negatives to the County General Fund and Fire Districts would increase proportionately. The one exception is Public Works expenses, which are not directly proportional to population. Public works expenses represent approximately 8% of total expenses and are estimated based upon the additional lane miles of roadway to be added per the General Plan Update Draft EIR.

2. The Existing General Plan permits more development outside of existing communities – This development pattern has the potential to trigger the need for additional facilities and infrastructure. For example, new fire stations could be necessary if significant population growth occurs outside the area served by existing stations. A facility such as a new fire station can add significant fixed operations and maintenance costs. Public Safety expenses that represent about 68% of projected General Fund expenses are also potentially affected. More dispersed population can increase travel time between law enforcement calls for service. This could result in an increase in the number of officers required in order to respond to the same number of calls for service. Based on these considerations, we would expect a larger net fiscal deficit per residential unit with the Existing General Plan than the $161 per unit our analysis indicates with the proposed General Plan Update.

Extrapolating the results of the fiscal impact analysis for the Update based on the assumption that approximately 7,500 additional residential units would be built under the Existing General Plan yields a total fiscal deficit in the range of $0.6 Million annually to the County General Fund and $2.0 million to the Fire Districts, for a combined net deficit of $2.6 million annually. This extrapolation is before consideration of the higher costs per residential unit likely under the Existing General Plan due to a larger share of development occurring outside of existing communities.

Attached Tables

A series of technical tables are attached:

Table 1 - A	Annual General Fund and Fire District Impacts
Table 1 - B	Annual County General Fund Impacts
Table 1 - C	Annual Fire District Impacts
Table 2	Population and Housing Added Under Hybrid Scenario
Table 3	Existing Population and Employment
Table 4	Estimated Assessed Value Added
Table 5A	General Fund and Fire District Revenue Source Assumptions
Table 5B	Annual General Fund Revenues
Table 5D	Projection of Annual General Fund Revenues
Table 6A	General Fund and Fire District Operating Expenses Assumptions
Table 6B	Annual General Fund Expenses
Table 6C	Public Works Maintenance Expenses
Table 6D	Annual Public Safety Expenses
Table 6E	Projection of Annual General Fund and Public Works Expenses
Table 7A	Annual Fire District Revenues
Table 7B	Annual Fire District Expenses
Table 7C	Annual Fire District Expenses – Call Generation Rate and Cost per Call Assumptions

Appendix A	Budget Inputs

Supporting Technical Tables
Fiscal Impact Analysis
Residential Development / County General Plan Update Hybrid Scenario

Table 1 - A

ANNUAL GENERAL FUND AND FIRE DISTRICT IMPACTS
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

		TOTAL	
COUNTY GENERAL FUND [(1)]			
Recurring Revenues	Table 1 - B	$9,101,000	$1,062 /Unit
Recurring Expenses	Table 1 - B	$9,414,000	$1,099 /Unit
NET ANNUAL GENERAL FUND REVENUE (EXPENSE)		**($313,000)**	($37) /Unit
FIRE DISTRICTS (Composite of Fire Districts Serving Unincorporated Area)			
Recurring Revenues	Table 1 - C	$2,200,000	$257 /Unit
Recurring Expenses	Table 1 - C	$3,270,000	$382 /Unit
NET ANNUAL FIRE DISTRICTS REVENUE (EXPENSE)		**($1,070,000)**	($125) /Unit
COUNTY GENERAL FUND AND FIRE DISTRICTS COMBINED		**($1,383,000)**	($161) /Unit

Notes:
(1) Plus non-General Fund Public Works expenses and Gas Tax Fund revenues.

Table 1 - B

ANNUAL COUNTY GENERAL FUND IMPACTS
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

		TOTAL	%		
COUNTY GENERAL FUND [1]					
Recurring Revenues					
Property Tax	Table 5 - B	$4,270,000	47%		
Property Tax In-Lieu of VLF	Table 5 - B	$2,080,000	23%		
Public Safety Sales Tax (Prop 172)	Table 5 - B	$1,281,000	14%		
Sales Tax (1% local share)	Table 5 - B	$937,000	10%		
Gas Tax	Table 5 - B	$270,000	3%		
Property Transfer Tax	Table 5 - B	$250,000	3%		
Fines and Forfeitures	Table 5 - B	$13,000	0%		
Total Revenue		**$9,101,000**	100%	$1,062	/Unit
Recurring Expenses					
Public Safety	Table 6 - D	$6,500,000	69%		
Land Use and Environment [2]	Table 6 - B	$1,273,000	14%		
Public Works	Table 6 - C	$760,000	8%		
Health and Human Services Agency	Table 6 - B	$488,000	5%		
Community Services Group	Table 6 - B	$247,000	3%		
Finance & General Government	Table 6 - B	$146,000	2%		
Total Expenses		**$9,414,000**	100%	$1,099	/Unit
NET ANNUAL GENERAL FUND REVENUE (EXPENSE)		**($313,000)**		($37)	/Unit

Notes:
[1] Plus non-General Fund Public Works expenses and Gas Tax Fund revenues.
[2] Except Public Works which is analyzed separately although part of the Land Use and Environment Group.

Table 1 - C

ANNUAL FIRE DISTRICT IMPACTS
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

		TOTAL	
ALPINE FIRE PROTECTION DISTRICT			
Recurring Revenues (Property Taxes)	Table 7 - A	$120,000	
Recurring Expenses	Table 7 - B	$110,000	
ALPINE NET ANNUAL REVENUE (EXPENSE) (To serve 620 new residents)		**$10,000**	$44 /Unit
SAN DIEGO RURAL FIRE PROTECTION DISTRICT			
Recurring Revenues (Property Taxes and CFD Special Taxes)	Table 7 - A	$1,560,000	
Recurring Expenses	Table 7 - B	$2,060,000	
RURAL NET ANNUAL REVENUE (EXPENSE) (To serve 13,364 new residents)		**($500,000)**	($105) /Unit
OTHER FIRE PROTECTION DISTRICTS SERVING SUBJECT PLANNING AREAS			
Recurring Revenues (Property Taxes)	Table 7 - A	$520,000	$144 /Unit
Recurring Expenses	Table 7 - B	$1,100,000	$306 /Unit
OTHER FIRE DISTRICT NET ANNUAL REVENUE (EXPENSE) (To serve 7,177 new residents)		**($580,000)**	($161) /Unit
TOTAL FIRE DISTRICTS (Composite of Fire Districts Serving Unincorporated Area)			
Recurring Revenues	Table 7 - A	$2,200,000	
Recurring Expenses	Table 7 - B	$3,270,000	
AGGREGATE FIRE DISTRICT NET ANNUAL REVENUE (EXPENSE) (To serve 20,541 new residents)		**($1,070,000)**	($125) /Unit

Table 2

POPULATION AND HOUSING ADDED UNDER HYBRID SCENARIO [1]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

PLANNING AREAS INCLUDED IN ANALYSIS	PORTION OF PLANNING AREA OUTSIDE CWA BOUNDARY	GENERAL PLAN UPDATE: HYBRID SCENARIO POPULATION AND HOUSING UNITS OUTSIDE OF COUNTY WATER AUTHORITY BOUNDARY		
		EXISTING	INCREASE	TOTAL
POPULATION (outside CWA only)				
Alpine	Portion	2,172	623	2,795
Central Mountain	Nearly All	5,002	1,388	6,390
Jamul-Dulzura	Portion	3,799	4,139	7,938
Julian	All	3,095	994	4,089
Mountain Empire	All	5,012	8,810	13,822
North Mountain	All	2,903	2,997	5,900
Pala-Pauma	Portion	3,210	1,590	4,800
Total		25,193	20,541	45,734
HOUSING UNITS (outside CWA only)				
Alpine	Portion	853	226	1,079
Central Mountain	Nearly All	2,141	700	2,841
Jamul-Dulzura	Portion	1,407	1,373	2,780
Julian	All	1,754	483	2,237
Mountain Empire	All	2,402	3,724	6,126
North Mountain	All	1,443	1,530	2,973
Pala-Pauma	Portion	1,165	532	1,697
Total		11,165	8,568	19,733

Notes:

[1] The analysis evaluates impacts from the estimated population increase under the proposed "Hybrid Scenario" for the Proposed General Plan.

[2] Per County staff does not include the Otay planning area since growth anticipated to occur in the Otay area is either within the County Water Authority (CWA) boundary or is proposed to be annexed into the CWA.

CWA = County Water Authority

Source: County of San Diego, July 2010.

Table 3

EXISTING POPULATION AND EMPLOYMENT
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	POPULATION [1]	EMPLOYMENT [2]	RESIDENTIAL EQUIVALENTS	DAY & NIGHTTIME POPULATION [3]
			0.33 per employee 1.00 per resident	
COUNTY OF SAN DIEGO	3,131,552	1,532,000	3,637,112	4,663,552
UNINCORPORATED AREA	491,764	136,000	536,644	627,764

Notes:

[1] State of California, Department of Finance, E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2008 and 2009. Sacramento, California, May 2009. 1/1/08 Estimate. Unincorporated area population was provided by the County and is sourced to SANDAG 2030 Regional Growth Forecast. 2008 estimates are used in both cases for consistency with revenue and expenditure information (which is for FY 2008-09) and the 2008 population figures referenced in the General Plan.

[2] Estimated based on SANDAG 2030 Regional Growth Forecast Update. July, 2008 (2008 estimate is extrapolation between 2004 and 2010 projection).

[3] Population + Employment

Table 4

ESTIMATED ASSESSED VALUATION ADDED
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

PLANNING AREA	NEW HOUSING UNITS	OWNER OCCUPIED HOUSING				RENTAL HOUSING				TOTAL AV ADDED $000s
	Table 2	*% of Units* [1]	*No. of Units*	*Avg. Sale Price* [3]	*Total AV $000s*	*% of Units* [1]	*No. of Units*	*Assessed Value* [4]	*Total AV $000s*	
Planning Area Totals										
Alpine	226	71%	160	$480,000	$77,000	29%	66	$100,000	$7,000	$84,000
Central Mountain	700	79%	553	$310,000	$171,000	21%	147	$100,000	$15,000	$186,000
Jamul-Dulzura	1,373	86%	1,181	$670,000	$791,000	14%	192	$100,000	$19,000	$810,000
Julian	483	74%	357	$405,000	$145,000	26%	126	$100,000	$13,000	$158,000
Mountain Empire	3,724	70%	2,607	$200,000	$521,000	30%	1,117	$100,000	$112,000	$633,000
North Mountain	1,530	74%	1,132	$500,000	$566,000	26%	398	$100,000	$40,000	$606,000
Pala-Pauma	532	62%	330	$500,000	$165,000	38%	202	$100,000	$20,000	$185,000
Total / Average[2]	8,568	74%	6,320	$385,000	$2,436,000	26%	2,248	$100,000	$226,000	$2,662,000
Fire District Service Area Totals										
Alpine FPD	226	71%	160	$480,000	$77,000	29%	66	$100,000	$7,000	$84,000
Rural FPD [5]	4,742	76%	3,587	$370,000	$1,318,000	24%	1,155	$100,000	$116,000	$1,434,000
All other FPD	3,600	71%	2,573	$400,000	$1,041,000	29%	1,027	$100,000	$103,000	$1,144,000
Total / Average[2]	8,568	74%	6,320	$385,000	$2,436,000	26%	2,248	$100,000	$226,000	$2,662,000

Notes:

[1] Based on existing percentage per General Plan Update Draft EIR Table 2.12-4 (sourced to 2000 Census).

[2] Specific development sites have not been identified; therefore, existing AVs could not be identified; however, it is assumed that existing unimproved AVs are relatively minor in comparison to developed values. Therefore, no deduction for existing AV is reflected in computing the net assessed valuation added.

[3] Based upon home sales data from Dataquick for home sales within the planning areas between May 2009 and May 2010 for homes built in the last decade. Sales data matched to planning areas on an approximate basis using zip codes. No home sales data available for Julian so use average of adjacent Central and North Mountain. Mountain empire based on sales data from MLS for January 2009 through July 2010 (given few sales available for Data Quick with this area).

[4] Estimated based upon Marshal and Swift Valuation service. Assumes wood frame construction and 1,000 SF average unit size.

[5] Number of units in Rural FPD per County. AV assumptions based on composite of planning areas corresponding to the Rural FPDs service area.

Table 5 - A

GENERAL FUND AND FIRE DISTRICT REVENUE SOURCE ASSUMPTIONS
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

GENERAL FUND REVENUES		See Tables 5 - B to 5 - C
Property Taxes		Based on estimated assessed value added (Table 4) and weighted average share of property tax to County General Fund
Property Transfer Tax	$1.10	Per $1,000 in sale price
	9.50%	Annual turn over for owner-occupied residential. Based upon average annual turnover of residential parcels in San Diego County 1997-98 to 2009-10.
		Rental units subject to substantial hold periods and not assumed to generate transfer tax revenues on an on-going/regular basis.
Sales Tax, 1% local share	22,434,724	Revenue in 2008-09
	491,764	Unincorporated Area Residents
	$45.62	Per Resident
Sales Tax, Prop 172 allocation	$195,279,371	Revenue in 2008-09 (1)
	3,131,552	County-Wide Residents
	$62.36	Per Resident
Gas Tax (2)	$41,168,160	2008-09 revenues (3)
(dedicated to public works)	3,131,552	Countywide Residents
	$13.15	Per Resident
Property Tax in Lieu of Vehicle	$218,190,440	Property Tax Based Revenues for 2004-05
License Fees (4)	$278,655,807,224	2004-05 San Diego County gross AV
	$0.783	Per $1,000 in AV growth
Fines, Forfeitures, Misc.	$2,309,421	2008-09 revenues
Charges	3,637,112	County-wide resident equivalents (5)
	$0.63	Per Resident Equivalent

Notes:

(1) Based on actual receipts per County staff which were slightly different than the transfer from the Prop 172 fund to the General Fund per budget information summarized in Appendix Table A -1. Prop 172 revenue is based upon the County's share of State-wide taxable sales. As County-wide sales increase, Prop 172 revenue increases. County-wide sales are assumed to increase based on population resulting in a corresponding increase in Prop 172 revenue. Data from the demographics research firm Claritas indicates that average per capita incomes in the subject planning areas are within 10% of the County average (based on data for zip codes which generally correspond to the planning areas that are the subject of this analysis) which is indicative that retail spending by residents of the subject areas is comparable to County averages.

(2) Allocation of gas tax to County of San Diego is primarily tied to the number of registered vehicles in the County (incorporated and unincorporated). The number of registered vehicles is assumed to be generally proportionate to population and therefore revenues are assumed to increase with population.

(3) Budget information did not separately identify gas tax revenues; amount is from State Controller's Office remittance advice for FY 2008-09.

(4) Estimated in accordance with SB 1096 based on data from the California State Controller's Office. 2004-05 is the base year used for purposes of this calculation. Future increases in revenue are related mathematically to the ratio between revenue and assessed value established in the 2004-05 base year.

(5) Resident Equivalent = 0.33 per Employee.

Source: County of San Diego. Adopted Operational Plan / Fiscal Years 2009-10 & 2010-11 (includes data on actual revenues and expenses for 2008-09). See Appendix A -1.

FIRE DISTRICTS REVENUE
(Table 7 A)

Property Taxes	Based on estimated assessed value added (Table 4) and weighted average share of property tax to Alpine, San Diego Rural and a composite of other fire districts serving the subject planning areas.
Community Facilities District Special Taxes	San Diego Rural Fire Protection District has established a Community Facilities District which imposes a special tax on new subdivisions in order to fund Fire Services. While not currently in place, we understand establishment of a similar district applicable to the County Service Area fire districts is also contemplated.

Table 5 - B

ANNUAL GENERAL FUND REVENUES [1]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

		BASIS		MEASURE [3]	TOTAL
GENERAL FUND REVENUES [1]					
PROPERTY TAX					
Alpine	$84,000	AV added ($000s) [2]	11.77%	County share of 1% tax [4]	$100,000
Central Mountain	$186,000	AV added ($000s) [2]	16.11%	County share of 1% tax [4]	$300,000
Jamul-Dulzura	$810,000	AV added ($000s) [2]	14.08%	County share of 1% tax [4]	$1,140,000
Julian	$158,000	AV added ($000s) [2]	17.72%	County share of 1% tax [4]	$280,000
Mountain Empire	$633,000	AV added ($000s) [2]	13.97%	County share of 1% tax [4]	$880,000
North Mountain	$606,000	AV added ($000s) [2]	20.49%	County share of 1% tax [4]	$1,240,000
Pala-Pauma	$185,000	AV added ($000s) [2]	17.92%	County share of 1% tax [4]	$330,000
	$2,662,000		16.0%	County share of 1% tax [4]	$4,270,000
PROPERTY TAX IN-LIEU OF VLF	$2,662,000	AV added ($000s) [2]	$0.783	per $1,000 in AV	$2,080,000
PROPERTY TRANSFER TAXES	$2,436,000	owner occ. AV ($000s) [2]	$1.10	per $1,000	$250,000
	9.50%	annual turnover			
SALES TAX (1% LOCAL SHARE)	20,541	residents [5]	$45.62	per resident	$937,000
PUBLIC SAFETY SALES TAX (PROP 172)	20,541	residents [5]	$62.36	per resident	$1,281,000
GAS TAX	20,541	residents [5]	$13.15	per resident equiv.	$270,000
FINES AND FORFEITURES	20,541	resident equivalents [5]	$0.63	per resident equiv.	$13,000
TOTAL GENERAL FUND REVENUES					$9,101,000

Notes:

(1) Includes gas tax revenues which are not technically General Fund. Gas taxes and the public works street maintenance expenses funded by gas taxes are included in the analysis.

(2) See Table 4.

(3) See Table 5 - A except where otherwise noted.

(4) Weighted average County General Fund share of property tax within each planning area based upon top 20 tax rate areas (TRAs) by AV.

(5) Resident equivalents = 1.0 per resident and 0.33 per employee. Since only new population is addressed in the analysis, the number of residents equivalents is the same as the number of residents.

Table 5 - C

PROJECTION OF ANNUAL GENERAL FUND REVENUES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	TOTAL
RECURRING GENERAL FUND REVENUES	
Property Tax	$4,270,000
Property Tax In-Lieu of VLF	$2,080,000
Sales Tax (1% local share)	$937,000
Public safety sales tax (prop 172)	$1,281,000
Property Transfer Tax	$250,000
Gas Tax	$270,000
Fines and Forfeitures	$13,000
TOTAL	**$9,101,000**

Table 6 - A

GENERAL FUND AND FIRE DISTRICT OPERATING EXPENSES ASSUMPTIONS [1]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

GENERAL FUND EXPENSES		See Tables 6 - B to 6 - E
Public Safety		Sheriff Law Enforcement [2]
	1 Patrol officer	per 10,000 population on a 24 / 7 Basis
	5.3 Positions	to provide one patrol officer on a 24 / 7 basis
	$285,000	Fully loaded cost per patrol officer estimated by Sheriff Dept. Cost is inclusive of support staff, supervisors & command staff, supplies and equipment.
		Public Safety Except Law Enforcement
		Courts, DA, Public Defender, Probation, others
	$654,750,295	Net GF Expense in 2008-09 [3]
	91%	Percent Variable Cost [4]
	3,637,112	County-wide Resident Equivalents
	$163.82	Cost Per Resident Equivalent
Land Use and Environment (Excl. Public Works analyzed separately)		*County-wide services (see detail Table A-2)*
	$11,961,460	Net GF Expense in 2008-09 [3]
	69%	Percent Variable Cost [4]
	3,637,112	County-wide Resident Equivalents [5]
	$2.28	Cost Per Resident Equivalent
		Services focused on unincorporated area (Table A-2)
	$32,024,516	Net GF Expense in 2008-09 [3]
	100%	Percent Variable Cost [4]
	536,644	Unincorporated Area Resident Equivalents [3]
	$59.68	Cost Per Resident Equivalent
	$61.95	Total Cost Per Resident Equivalent
Public Works (within Land Use & Environment Group)	$53,424,254	Net Expense in 2008-09 (Table A-3)
	2,605	Existing lane miles served [6]
	$20,508	Fully loaded PW cost per Lane Mile (includes non-road related costs which are also assumed to be generally proportional to size of planned road network)
Health and Human Services Agency	$74,352,075	Net GF Expense in 2008-09 [3]
	3,131,552	County-wide Population
	$23.74	Cost Per Resident

Table 6 - A

GENERAL FUND AND FIRE DISTRICT OPERATING EXPENSES ASSUMPTIONS [1]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

Community Services Group		*County-wide services*
	$30,064,231	Net GF Expense in 2008-09 [3]
	61%	Percent Variable Cost [4]
	3,131,552	County-wide Population
	$5.81	Cost Per Resident
		Services focused on unincorporated area
	$3,063,575	Net GF Expense in 2008-09 [3]
	100%	Percent Variable Cost [4]
	491,764	Unincorporated Area Population
	$6.23	Cost Per Resident
	$12.04	Total Cost Per Resident
Finance & General Government	$92,417,292	Net GF Expense in 2008-09 [3]
	28%	Percent Variable Cost [4]
	3,637,112	Resident Equivalents [3]
	$7.11	Per Resident Equivalent
County Library	*No General Fund Impact*	The County Library receives only a limited discretionary allocation from the County General Fund which varies from year to year and is not dependant upon population growth. Most funding for library service comes from a designated share of property tax revenue which is not part of the County General Fund.

FIRE DISTRICTS EXPENSES
(see Table 7 - B)

Estimated cost of service for a representative composite of existing fire districts based upon existing average cost per service call to the San Diego Rural and Alpine Fire Protection Districts whose service areas account for approximately 70% of the total population growth covered by the analysis.

Notes:

[1] For County service departments.

[2] All factors provided by the San Diego County Sheriff's department in an estimate transmitted to KMA on 7/16/2010. The estimated figures provided are based on fully loaded costs per position using department wide costs. Actual costs will vary as growth occurs and could be lower than the estimate depending upon the distribution of population growth.

[3] See Appendix Table A - 2.

[4] Variable cost factors developed based on review by County Staff of the activities of each individual service group.

[5] Resident equivalents is a measure of service population representing both population and employees. Residents weighted as 1.0 resident equivalents per resident. Employees weighted as 0.33 resident equivalents. Weighting recognizes that employees also generate service costs, but not to the same extent as residents. See Table 3.

[6] Based on planned road network per EIR excluding State highway and "unplanned" roads.

Source: County of San Diego. Adopted Operational Plan / Fiscal Years 2009-10 & 2010-11 (includes data on actual revenues and expenses for 2008-09). See Appendix A - 2.

Table 6 - B

ANNUAL GENERAL FUND EXPENSES (except Public Safety, Public Works)
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	BASIS [1]		MEASURE [2]		TOTAL
GENERAL FUND EXPENSES (except Public Safety, Public Works)					
Land Use and Environment	20,541	resident equivalents	$61.95	per resident equiv.	$1,273,000
Community Services Group	20,541	residents	$12.04	per resident	$247,000
Health and Human	20,541	residents	$23.74	per resident	$488,000
Finance & General	20,541	resident equivalents	$7.11	per resident equiv.	$146,000
TOTAL GENERAL FUND EXPENSES (except Public Safety, Public Works)					**$2,154,000**

Notes:

[1] See Table 2. Resident equivalents = 1.0 per resident and 0.33 per employee. Since only new population is addressed in the analysis, the number of resident equivalents is the same as the number of residents.

[2] See Table 6 - A

Table 6 - C

ANNUAL PUBLIC WORKS MAINTENANCE EXPENSES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	Lane Miles of Roadway [1]				
	Existing	Proposed	Net Added Entire Planning Area	Allocation to Area Outside of CWA	Estimate of Net Added Outside of CWA
				based on % population growth occurring outside water service area	
County Maintained Roadways					
Alpine	127	142	15	6%	0.9
Central Mountain	180	212	32	100%	32.0
Jamul-Dulzura	148	160	12	59%	7.1
Julian [2]	61	26	-35	100%	-35.0
Mountain Empire	208	220	12	100%	12.0
North Mountain	164	182	18	100%	18.0
Pala-Pauma	41	49	8	27%	2.1
	929	991	62		37.1
Public Works - Average Cost Per Lane Mile [3]					$20,508
Projected Added Public Works Expense					**$760,000**

Notes:

[1] Based upon DEIR April 2, 2010. Tables 2.15-5 and 2.15-18. Excludes State highways which are not maintained by the County. Inclusive of "planned" road network only.

[2] In the Julian area, DEIR indicates increase in State Highways and decrease in lane miles of county-maintained roads; therefore, it appears a portion of the County-maintained roads will be converted to State Highway.

[3] Fully loaded PW cost per Lane Mile (includes non-road related costs which are also assumed to be generally proportional to lane miles served).

CWA = County Water Service Area

Table 6 - D

ANNUAL PUBLIC SAFETY EXPENSES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	BASIS		MEASURE				TOTAL
PUBLIC SAFETY EXPENSES							
Public Safety - Law Enforcement Patrol Positions	20,541	residents	1.0	/10,000 residents [1] 24 hrs / 7 days	5.3	positions needed to[2] achieve 1 position on 24 / 7 basis	11.0 new patrol positions
Law enforcement expense	11	positions	$285,000	per position [3]			$3,135,000
Public Safety Except Law Enforcement (including Courts, District Attorney, Public Defender, Probation, and others)	20,541	resident equiv.	$163.82	per resident equiv.			$3,365,000
TOTAL PUBLIC SAFETY EXPENSE							**$6,500,000**

[1] Per the San Diego County Sheriff's Department. Standard generally based upon California League of Cities recommendations.

[2] Per the San Diego County Sheriff's Department, 5.3 patrol positions are necessary to staff one position on a 24 / 7 basis accounting for sick time, vacation, training days, etc.

[3] Estimate of fully loaded cost per position provided by the San Diego Sheriff's Department. Cost is inclusive of support staff, supervisors & command staff, supplies and equipment. The estimated figures provided are based on fully loaded costs per position using department wide costs. Actual costs will vary as growth occurs and could be lower than the estimate depending upon the distribution of population growth.

Table 6 - E

PROJECTION OF ANNUAL GENERAL FUND AND PUBLIC WORKS EXPENSES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	TOTAL
RECURRING GENERAL FUND EXPENDITURES	
Public Safety	$6,500,000
Public Works	$760,000
Land Use and Environment	$1,273,000
Health and Human Svcs Agency	$488,000
Finance & General Government	$146,000
Community Services Group	$247,000
TOTAL	**$9,414,000**

Table 7 - A

ANNUAL FIRE DISTRICT REVENUES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

		BASIS [3]		MEASURE	TOTAL
FIRE DISTRICT REVENUES					
Alpine Fire Protection District					
Property Tax	$84,000	AV added ($000s)	13.77%	Fire Districts share of 1% tax [2]	$120,000
San Diego Rural Fire Protection District					
Property Tax	$1,434,000	AV added ($000s)	1.92%	Fire Districts share of 1% tax [2]	$280,000
Community Facilities District Special Taxes	4,742	Units	$271	Per Unit [4]	$1,280,000
					$1,560,000
Other Districts [1] [5]					
Property Tax	$1,144,000	AV added ($000s)	4.51%	Fire Districts share of 1% tax [2]	$520,000
TOTAL FIRE PROTECTION DISTRICT REVENUES					$2,200,000

Notes:

[1] There are numerous fire districts serving the planning areas that are the subject of this analysis. Specific revenue and cost data were obtained for Alpine and San Diego Rural Fire Protection Districts, which provide service to planning areas representing approximately 70% of population growth under the General Plan Update Hybrid Scenario. Other Fire districts were analyzed as a representative composite.

[2] Weighted average share of 1% tax rate which accrues to fire districts based upon top 20 tax rate areas (TRAs) by existing AV within each planning area.

[3] See Table 4.

[4] Based on special tax formula for CFD 04-01 which is applicable to new subdivisions throughout the SDRFPD service area with the exception of certain specific plan areas subject to separate CFDs. Rate is based on special tax rate for 2,000 to 2,499 SF units escalated to 2008-09 consistent with revenue and cost basis of analysis.

[5] This analysis does not assume the additional funding for fire services that could potentially be available through a future community facilities district.

Table 7 - B

ANNUAL FIRE DISTRICT EXPENSES
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

					TOTAL

Overall assumptions for Fire District Analysis: Population growth occurs primarily within areas served by existing stations. Maintain existing service models. Scale up operations in proportion to service call demand. This generalized approach to the fire district analysis did not include an evaluation of whether any single station which will be impacted has available capacity to absorb some portion of the anticipated additional call volume without additional cost or whether it will consider changing service models.

ALPINE FIRE PROTECTION DISTRICT					
Revenues					
Projected Additional Service Calls	623	residents [2]	0.31	Calls per resident[1]	193 Calls
Estimated Cost of Additional Service Calls			$573	per service call [1]	$110,000
SAN DIEGO RURAL FIRE PROTECTION DISTRICT					
Projected Service Calls Generated by Population Growth					
Projected Additional Service Calls	13,364	residents [3]	0.31	Calls per resident[1]	4,143 Calls
Estimated Cost of Additional Service Calls			$496	per service call [1]	$2,060,000
OTHER FIRE DISTRICTS					
Projected Service Calls Generated by Population Growth					
Projected Additional Service Calls	7,177	residents [4]	0.31	Calls per resident[1]	2,225 Calls
Estimated Cost of Additional Service Calls			$496	per service call [1]	$1,100,000
TOTAL FIRE SERVICE COST					**$3,270,000**

Notes:
[1] See Table 7 - C
[2] Assumes all population growth in Alpine reflected in Table 2 is within the Alpine FPD service area.
[3] County estimate of portion of total population growth occurring within San Diego Rural Fire Protection District's boundaries.
[4] Balance of population growth shown in Table 2 served by other fire districts.

Table 7 - C

FIRE DISTRICT ANALYSIS - CALL GENERATION RATE AND COST PER CALL CALCULATIONS
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	TOTAL	NOTE
ESTIMATED FIRE DISTRICT CALLS FOR SERVICE GENERATED BY NEW POPULATION		
Estimated Call Generation Rate: based on assumption that Alpine Fire Protection District's service area is generally representative of growth that would be experienced under the Hybrid Scenario. Call generation rate calculated based on each responding unit being counted as a separate call recognizing that multiple units frequently respond to a single incident.		
Total Calls for Service - Alpine FPD	11,412	Over 2.5 year period from 1/1/2007 to 6/30/2009
(Less) calls to I-8	(1,338)	not assumed to originate from population in Alpine FPD service area
Adjusted AFPD calls	10,074	
Average annual calls	4,030	Divide by 2.5 to convert to annual figure
Population of AFPD service area	13,000	Estimate as of 2008 based on 2004 population adjusted by population growth rate in Alpine planning area over the period based on County data.
Average Annual Calls per resident	**0.31**	
ESTIMATED AVERAGE FIRE DISTRICT COST PER SERVICE CALL		
Estimated Average Cost per Service Call - Data obtained for San Diego Rural Fire and Alpine FPD, these areas were selected and are assumed to be representative since they provide service to the planning areas in which approx. 70% of population growth would occur under the Hybrid Scenario.		
San Diego Rural Fire Protection District		
Total Expenses in FY 2008-09	$3,923,827	Net expense for 2008-09 (See Table A - 4)
SDRFPD Calls for Service	19,760	from 1/1/2007 to 6/30/2009
SDRFPD Calls for Service - annualized	7,904	Divide by 2.5 to convert to annual figure
Average Cost Per Service Call	**$496**	
Other Fire Districts: Analysis assumes San Diego Rural Cost per Call		
Alpine Fire Protection District		
Total Expenses in FY 2008-09	$2,615,123	Net expense for 2008-09 (See Table A - 5)
APFPD Calls for Service	11,412	from 1/1/2007 to 6/30/2009
APFPD Calls for Service - annualized	4,565	Divide by 2.5 to convert to annual figure
Average Cost Per Service Call	**$573**	

Sources: Alpine Fire Protection District Budget for FY 2009-10 (which provides information on actual expenses for FY 2008-09). San Diego Rural Fire Protection District Budget for FY 2008-09. Service call data aggregated by Citygate Associates.

APPENDIX A: BUDGET INPUTS

Appendix A - 1

SUMMARY OF ACTUAL GENERAL FUND REVENUE SOURCES FOR 2008-09 [1]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	ACTUAL GENERAL FUND REVENUES 2008-09 [(1)]		Subtotal
GENERAL PURPOSE REVENUE			
Property Taxes			
Property Taxes Current Unsecured	16,854,179		
Property Taxes Current Unsecured Suppl.	68,734		
Property Taxes Current Secured	500,485,408		
Property Taxes Current Supplemental	2,433,607		
Property Taxes Prior Secured Supplemental	10,180,880		
Property Taxes Prior Secured	429,687		
Teeter Prop Tax Cumulative Prior Yrs	4,894,299		
Teeter Prop Tax Prior Yr	14,570,880		
Teeter Tax Reserve Excess	16,612,438		
Other Tax Aircraft Unsecured	3,165,289		
Property Taxes Prior Unsecured	350,272		
State Aid HOPTR	3,944		
State Aid HOPTR	5,068,739		
Property Taxes Prior Unsecured Suppl.	573,140		
Property Taxes Prior Secured	137,884		
Property Taxes Prior Secured Supplemental	(817)		
Penalties & Cost Delinquency Taxes	986,123		
Penalties & Cost Delinquency Taxes	16,941,342		
Penalties & Cost Delinquency Taxes	49,975		
		$	593,806,002
Sales Tax			
Sales & Use Taxes	16,520,501		
In Lieu Local Sales & Use Tax	5,914,223		
			22,434,724
Property Tax In Lieu of VLF	316,925,405	$	316,925,405
Real Property Transfer Taxes	12,327,273	$	12,327,273

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]	Subtotal
Fines and Forfeitures		
Fines & Forfeitures PC 1463.28	26,985	
Red Light Violation Co / Ag	12,650	
General Court Fines	22,195	
Littering Fines	2,652	
General Vehicle Code Fee	338,731	
Cities Arrests Fines	111,158	
Cities Arrests Fines	134,833	
General Vehicle Code Fee	1,147	
Littering Fines	548	
General Court Fines	12,362	
Red Light Violation Co / Ag	100,747	
Fines & Forfeitures PC 1463.28	89,895	
General Vehicle Code Fee	249,815	
Fines & Forfeitures PC 1463.28	69,858	
General Vehicle Code Fee	324,787	
Cities Arrests Fines	575,133	
Animal Control Ordinance	177	
Red Light Violation Co / Ag	14,471	
General Court Fines	66,738	
General Court Fines	50,195	
Littering Fines	1,818	
Red Light Violation Co / Ag	9,390	
General Vehicle Code Fee	13,883	
Fines & Forfeitures PC 1463.28	79,256	
		2,309,421
TOTAL INCLUDED GENERAL PURPOSE REVENUES		$ 947,802,824
Departmental Revenues Modeled as General Purpose		
Public Safety Sales Taxes (Operating Transfer from Prop 172 Fund)		
District Attorney	39,454,244	
Probation	15,404,491	
Sheriff	140,726,743	
Total		195,585,479
DEPARTMENTAL / REVENUES TIED TO SPECIFIC PROGRAMS		
PUBLIC SAFETY GROUP		
Child Support Services		
Charges For Current Services	1,877,867	
Intergovernmental Revenues	50,629,833	
Miscellaneous Revenues	20,453	
Other Financing Sources	5,580	
		$ 52,533,733
Citizens' Law Enforcement Review Board		
Charges For Current Services	83	
Miscellaneous Revenues	679	
		$ 762
Contribution for Trial Courts		
Charges For Current Services	17,883,353	
Fines, Forfeitures & Penalties	12,592,213	
Licenses Permits & Franchises	137,965	
		$ 30,613,530
Defense Attorney / Contract Administration		
Charges For Current Services	222,177	$ 222,177

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]	Subtotal
District Attorney		
Charges For Current Services	1,052,584	
Intergovernmental Revenues	18,488,010	
Miscellaneous Revenues	3,572,253	
Other Financing Sources	39,657,364	
(less) prop 172 revenue reflected as General Purpose above	(39,454,244)	
		$ 23,315,968
Medical Examiner		
Charges For Current Services	637,912	
Intergovernmental Revenues	197,890	
Miscellaneous Revenues	53,442	
		$ 889,243
Office of Emergency Services		
Charges For Current Services	1,712	
Intergovernmental Revenues	5,028,551	
Miscellaneous Revenues	1,976	
		$ 5,032,239
Probation		
Charges For Current Services	8,945,609	
Fines, Forfeitures & Penalties	75,474	
Intergovernmental Revenues	49,060,632	
Miscellaneous Revenues	14,550	
Other Financing Sources	15,410,494	
(less) prop 172 revenue reflected as General Purpose above	(15,404,491)	
		$ 58,102,267
Public Defender		
Charges For Current Services	1,227,732	
Fines, Forfeitures & Penalties	51,347	
Intergovernmental Revenues	11,597,852	
Miscellaneous Revenues	442,325	
		$ 13,319,255
Public Safety Group Executive Office		
Charges For Current Services	708,763	
Miscellaneous Revenues	545,664	
		$ 1,254,427
Sheriff		
Charges For Current Services	96,545,625	
Fines, Forfeitures & Penalties	7,938,321	
Intergovernmental Revenues	56,708,327	
Licenses Permits & Franchises	501,220	
Miscellaneous Revenues	1,998,198	
Other Financing Sources	143,277,223	
(less) prop 172 revenue reflected as General Purpose above	(140,726,743)	
		$ 166,242,171
Subtotal Public Safety Group		$ 351,525,772
HEALTH AND HUMAN SERVICES AGENCY		
Administrative Support		
Charges For Current Services	2,429,049	
Intergovernmental Revenues	5,720,357	
Miscellaneous Revenues	1,110,954	
Other Financing Sources	237	
		$ 9,260,597
Aging and Independence Services		
Fines, Forfeitures & Penalties	274,342	
Intergovernmental Revenues	285,931,704	
Miscellaneous Revenues	6,489,563	
Other Financing Sources	105,278	
		$ 292,800,887

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]	Subtotal
Behavioral Health Services		
Charges For Current Services	28,508,847	
Intergovernmental Revenues	303,433,554	
Miscellaneous Revenues	1,051,845	
Other Financing Sources	6,000,000	
		$ 338,994,246
Child Welfare Services		
Charges For Current Services	669,387	
Intergovernmental Revenues	278,125,134	
Miscellaneous Revenues	725,078	
		$ 279,519,599
Public Administrator / Public Guardian		
Charges For Current Services	1,253,454	
Intergovernmental Revenues	80,837	
Licenses Permits & Franchises	46,528	
Miscellaneous Revenues	30,023	
		$ 1,410,841
Public Health Services		
Charges For Current Services	1,873,124	
Fines, Forfeitures & Penalties	2,328,860	
Intergovernmental Revenues	67,651,908	
Licenses Permits & Franchises	155,743	
Miscellaneous Revenues	712,507	
Other Financing Sources	502,505	
		$ 73,224,647
Regional Operations		
Charges For Current Services	1,825,181	
Fines, Forfeitures & Penalties	40,000	
Intergovernmental Revenues	396,334,827	
Licenses Permits & Franchises	871,607	
Miscellaneous Revenues	310,796	
		$ 399,382,410
Strategic Planning & Operational Support		
Charges For Current Services	11,635,373	
Fines, Forfeitures & Penalties	3,117,884	
Intergovernmental Revenues	122,835,848	
Miscellaneous Revenues	2,588,331	
Other Financing Sources	17,600,000	
		$ 157,777,436
Subtotal Health and Human Services Agency		$ 1,552,370,662
LAND USE AND ENVIRONMENT GROUP		
Agriculture, Weights and Measures		
Charges For Current Services	648,029	
Fines, Forfeitures & Penalties	191,401	
Intergovernmental Revenues	8,388,895	
Licenses Permits & Franchises	3,716,146	
Miscellaneous Revenues	97,472	
		$ 13,041,944
Environmental Health		
Charges For Current Services	12,330,074	
Fines, Forfeitures & Penalties	283,501	
Intergovernmental Revenues	3,310,573	
Licenses Permits & Franchises	19,630,465	
Miscellaneous Revenues	1,180,570	
		$ 36,735,184

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]		Subtotal
Farm and Home Advisor			
Intergovernmental Revenues	21,284	$	21,284
Land Use and Environment Executive Group			
Charges For Current Services	315,481	$	315,481
Parks and Recreation			
Charges For Current Services	5,270,471		
Fines, Forfeitures & Penalties	5,419		
Intergovernmental Revenues	626,946		
Miscellaneous Revenues	702,438		
Other Financing Sources	510,738		
		$	7,116,011
Planning and Land Use			
Charges For Current Services	10,010,177		
Fines, Forfeitures & Penalties	644,340		
Intergovernmental Revenues	1,811,287		
Licenses Permits & Franchises	2,748,802		
Miscellaneous Revenues	5,682		
Other Financing Sources	15,904		
Taxes Other Than Current Secured	30,086		
		$	15,266,278
Public Works			
Charges For Current Services	190,589		
Intergovernmental Revenues	(2,975,496)		
Miscellaneous Revenues	227		
		$	(2,784,681)
San Diego Geographic Information Source (SanGIS)			
Charges For Current Services	142,693		
Intergovernmental Revenues	400,102		
		$	542,795
Subtotal Land Use and Environment Group		$	70,254,295
COMMUNITY SERVICES GROUP			
Animal Services			
Charges For Current Services	8,701,986		
Fines, Forfeitures & Penalties	3,455		
Intergovernmental Revenues	41,052		
Licenses Permits & Franchises	2,201,747		
Miscellaneous Revenues	43,298		
		$	10,991,538
Community Services Group Executive Office			
Charges For Current Services	802,477		
Intergovernmental Revenues	372		
Miscellaneous Revenues	617		
		$	803,466
Housing & Community Development			
Charges For Current Services	15,760		
Intergovernmental Revenues	9,708,270		
Miscellaneous Revenues	207,449		
		$	9,931,479
Registrar of Voters			
Charges For Current Services	5,913,688		
Intergovernmental Revenues	496,519		
Miscellaneous Revenues	754,118		
		$	7,164,326
Subtotal Community Services Group		$	28,890,808

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]		Subtotal
FINANCE AND GENERAL GOVERNMENT GROUP			
Assessor / Recorder / County Clerk			
Charges For Current Services	32,508,186		
Licenses Permits & Franchises	512,710		
Miscellaneous Revenues	698,780		
		$	33,719,676
Auditor and Controller			
Charges For Current Services	6,875,172		
Intergovernmental Revenues	42,497		
Miscellaneous Revenues	233,457		
		$	7,151,125
Board of Supervisors			
Charges For Current Services	1,419		
Miscellaneous Revenues	37		
		$	1,456
Chief Administrative Office			
Charges For Current Services	134,644		
Miscellaneous Revenues	92		
			134,736
Civil Service Commission			
Charges For Current Services	50,837		
Miscellaneous Revenues	125		
		$	50,962
Clerk of the Board of Supervisors			
Charges For Current Services	351,517		
Miscellaneous Revenues	42,729		
		$	394,246
County Counsel			
Charges For Current Services	11,318,161		
Miscellaneous Revenues	263,300		
		$	11,581,461
County Technology Office			
Charges For Current Services	489,917		
Intergovernmental Revenues	4,455		
		$	494,372
Finance & Genl Govt Exec Office			
Charges For Current Services	534,487		
Miscellaneous Revenues	21,020,580		
Other Financing Sources	4,964,924		
		$	26,519,992
Grand Jury			
Miscellaneous Revenues	18	$	18
Human Resources			
Charges For Current Services	1,206,414		
Intergovernmental Revenues	189		
Miscellaneous Revenues	5,779,276		
			6,985,879
Treasurer - Tax Collector			
Charges For Current Services	11,263,473		
Fines, Forfeitures & Penalties	1,010,718		
Miscellaneous Revenues	22,824		
			12,297,015
Subtotal Finance and General Government Group			99,330,936

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]		Subtotal	
EXCLUDED REVENUES				
FINANCE OTHER				"Finance Other" revenues and expenses are assumed to be independent of new development.
Community Enhancement				
Miscellaneous Revenues	5,000	$	5,000	
Contributions to Capital Outlay Funds				
Charges For Current Services	622,954			
Fines, Forfeitures & Penalties	2,781,655			
Intergovernmental Revenues	800,000			
Miscellaneous Revenues	(697,968)			
Other Financing Sources	2,275,000			
			5,781,641	
Countywide General Expense				
Miscellaneous Revenues	14,949,093			
Refunding Bonds Issued	443,515,000			
		$	458,464,093	
Community Projects / Neighborhood Reinvestment Program				
Miscellaneous Revenues	71,204	$	71,204	
Subtotal Finance / Other			464,321,938	Assumed to be independent of new development
Revenue from Use of Money and Property	10,836,019		10,836,019	Assumed to be independent of new development
Use of Fund Balance	54,937,673		54,937,673	
Redevelopment Agency Tax Increment	37,750,506	$	37,750,506	not in a RDA
Transient Occupancy Tax	2,827,952	$	2,827,952	No hotel
Interest Earnings				
Interest On Deposits & Investments	823,667			Assumed to be independent of new development
Interest On Deposits & Investments	68,816			
Interest On Deposits & Investments	13,673,864			
			14,566,347	
Intergovernmental Revenue				
Aid From City Of San Diego	4,971,688			Assumed to be independent of new development
Aid From Other Government Agencies	5,361			
Federal In-Lieu Taxes	1,476,715			
			6,453,764	
Franchises	5,406,201	$	5,406,201	Assumed to be independent of new development

	ACTUAL GENERAL FUND REVENUES 2008-09 [1]	Subtotal	
Miscellaneous General Purpose Revenues			
Local Detention Facility Revenue Account	2,592,671		
Collection of Discharged Accounts	709		
Miscellaneous Taxes	11,246		
Miscellaneous Taxes	121		
Returned Check Fee	75		
Service To Property Owners	210		
Charges In Library Fund	4,801		
Other Miscellaneous	4,195		
Charges In Liquid Waste Enterprise	377		
Charges In Inactive Waste Fund	31		
Charges In Internal Service Funds	80,811		
Charges In Road Fund	342,873		
Other Miscellaneous	510		
Flex-Plan Forfeitures	2,585,181		Assumed to be
Other Miscellaneous	26,946		independent of new
Recovered Expenditures	941		development
		$ 5,651,698	
Subtotal Revenues Excluded from Analysis		602,752,097	
TOTAL GENERAL FUND REVENUE		**3,848,512,874**	

Notes:

[1] For funding County departmental services

Source: County of San Diego. Adopted Operational Plan / Fiscal Years 2009-10 & 2010-11 (includes data on actual revenues and expenses for 2008-09).

Appendix A - 2

SUMMARY OF ACTUAL GENERAL FUND EXPENDITURES FOR 2008-09 (1)
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	ACTUAL GENERAL FUND EXPENSES 2008-09 (1)	(LESS) DEPARTMENTAL AND PROGRAM REVENUES 2008-09 (1)	(LESS) ADJUSTMENTS AND ONE-TIME EXPENDITURES 2008-09 (1)	NET COUNTY GENERAL FUND EXPENSE AFTER PROGRAM REVENUE 2008-09 (1)	PRIMARY SERVICE AREA
Public Safety Group					
Alternate Public Defender	$16,458,535	$0	$0	$16,458,535	County-Wide
Child Support Services	$49,763,965	$52,533,733	$0	($2,769,768)	County-Wide
Citizens' Law Enforcement Review Board	$424,648	$762	$0	$423,886	County-Wide
Contribution for Trial Courts	$71,393,305	$30,613,530	$0	$40,779,775	County-Wide
Defense Attorney / Contract Administration	$5,149,217	$222,177	$0	$4,927,040	County-Wide
District Attorney	$144,582,205	$23,315,968	$0	$121,266,237	County-Wide
Medical Examiner	$8,672,555	$889,243	$0	$7,783,312	County-Wide
Office of Emergency Services	$9,538,776	$5,032,239	$0	$4,506,537	County-Wide
Probation	$174,670,116	$58,102,267	$0	$116,567,849	County-Wide
Public Defender	$58,955,223	$13,319,255	$0	$45,635,968	County-Wide
Public Safety Group	$10,940,905	$1,254,427	$0	$9,686,478	County-Wide
Sheriff					
- Sheriff Law Enforcement Services (2)	$189,816,573	$78,800,702	$0	$111,015,871	Unincorporated
- Courts, Detention facilities, other Sheriff svcs	$376,925,915	$87,441,469	$0	$289,484,446	County-Wide
	$566,742,488	$166,242,171	$0	$400,500,317	
	$1,117,291,938	$351,525,772	$0	$765,766,166	
			Subtotal County-Wide	$654,750,295	
		Subtotal Unincorporated: Sheriff Law Enforcement		$111,015,871	
Health and Human Services Agency					
Administrative Support	$60,305,410	$9,260,597	$24,400,000	$26,644,813	County-Wide
Aging and Independence Services	$295,166,297	$292,800,887	$100,000	$2,265,411	County-Wide
Behavioral Health Services	$353,033,850	$338,994,246	$2,100,000	$11,939,604	County-Wide
Child Welfare Services	$244,031,357	$279,519,599	$200,000	($35,688,242)	County-Wide
Public Administrator / Public Guardian	$4,253,956	$1,410,841	$0	$2,843,115	County-Wide
Public Health Services	$72,975,598	$73,224,647	$700,000	($949,049)	County-Wide
Regional Operations	$477,970,133	$399,382,410	$0	$78,587,723	County-Wide
Strategic Planning & Operational Support	$148,686,136	$157,777,436	$2,200,000	($11,291,300)	County-Wide
	$1,656,422,737	$1,552,370,662	$29,700,000	$74,352,075	

	ACTUAL GENERAL FUND EXPENSES 2008-09 [1]	(LESS) DEPARTMENTAL AND PROGRAM REVENUES 2008-09 [1]	(LESS) ADJUSTMENTS AND ONE-TIME EXPENDITURES 2008-09 [1]	NET COUNTY GENERAL FUND EXPENSE AFTER PROGRAM REVENUE 2008-09 [1]	PRIMARY SERVICE AREA	
Land Use and Environment Group						
Agriculture, Weights and Measures	$18,942,467	$13,041,944	$0	$5,900,523	92% County-wide	
Environmental Health	$36,554,536	$36,735,184	$0	($180,648)	99% County-Wide	
Farm and Home Advisor	$839,199	$21,284	$0	$817,915	50% County-Wide	
Executive Office	$3,986,769	$315,481	$0	$3,671,288	County-Wide	
Parks and Recreation (3) (4)	$30,521,114	$7,116,011	$1,613,000	$21,792,103	12% County-Wide	excl. special district & one time costs
Planning and Land Use	$42,106,745	$15,266,278	$15,293,595	$11,546,872	Unincorporated	Adjmt nets out Fire - analyzed separately
Public Works (4)	$11,016,510	($2,784,681)	$3,100,542	$10,700,649	See Table A-3	See Table A-3
San Diego Geographic Information Source (SanGIS	$980,716	$542,795	$0	$437,921	Unincorporated	
	$144,948,056	$70,254,295	$20,007,136	$54,686,624		
			Subtotal County-Wide Excluding Public Works	$11,961,460		
			Subtotal Unincorporated Excluding Public Works	$32,024,516		
			Public Works (GF items only)	$10,700,649		See Table A-3
Community Services Group						
Animal Services (5)	$14,173,016	$10,991,538	$0	$3,181,478	Unincorporated	contract svcs to select cities
Executive Office	$9,620,280	$803,466	$0	$8,816,814	County-Wide	
County Library	$0	$0	$0	$0	not General Fund	
General Services	$2,303,737	$0	$0	$2,303,737	County-Wide	
Housing & Community Development	$9,813,576	$9,931,479	$0	($117,903)	Unincorporated	
Purchasing and Contracting	$735,000	$0	$0	$735,000	County-Wide	
Redevelopment Agency	$0	$0	$0	$0	not General Fund	
Registrar of Voters	$25,373,005	$7,164,326	$0	$18,208,679	County-Wide	
	$62,018,614	$28,890,808	$0	$33,127,806		
			Subtotal County-Wide	$30,064,231		
			Subtotal Unincorporated	$3,063,575		

	ACTUAL GENERAL FUND EXPENSES 2008-09 [1]	(LESS) DEPARTMENTAL AND PROGRAM REVENUES 2008-09 [1]	(LESS) ADJUSTMENTS AND ONE-TIME EXPENDITURES 2008-09 [1]	NET COUNTY GENERAL FUND EXPENSE AFTER PROGRAM REVENUE 2008-09 [1]	PRIMARY SERVICE AREA	
Finance and General Government Group						
Assessor / Recorder / County Clerk	$52,736,678	$33,719,676	$0	$19,017,002	County-Wide	
Auditor and Controller	$35,915,961	$7,151,125	$0	$28,764,836	County-Wide	
Board of Supervisors	$7,264,503	$1,456	$0	$7,263,047	County-Wide	
Chief Administrative Office	$4,553,754	$134,736	$0	$4,419,018	County-Wide	
Civil Service Commission	$596,372	$50,962	$0	$545,410	County-Wide	
Clerk of the Board of Supervisors	$7,835,825	$394,246	$0	$7,441,579	County-Wide	
County Counsel	$22,678,912	$11,581,461	$0	$11,097,451	County-Wide	
County Technology Office	$8,941,797	$494,372	$0	$8,447,425	County-Wide	
Finance & Genl Govt Exec Office	$10,153,423	$26,519,992	$0	($16,366,569)	County-Wide	
Grand Jury	$658,055	$18	$0	$658,038	County-Wide	
Human Resources	$21,272,124	$6,985,879	$0	$14,286,245	County-Wide	
Treasurer - Tax Collector	$19,140,824	$12,297,015	$0	$6,843,809	County-Wide	
	$191,748,228	$99,330,936	$0	$92,417,292		
EXPENSES ASSUMED TO BE INDEPENDENT OF NEW DEVELOPMENT						
Finance Other	$676,083,298	$464,321,938	$0	$211,761,360	County-Wide	assumed to be independent of new development
Total General Fund Expenditures	$3,848,512,871	$2,566,694,412	$49,707,136	$1,232,111,323		
			Subtotal County-Wide	$1,086,007,361		
			Subtotal Unincorporated	$146,103,961		

Notes:

[1] Fiscal year 2008-09 is the most recent year information on actual revenues and expenses is available.

[2] Sheriff provides law enforcement service to unincorporated area and nine contract cities. Cost to serve nine contract cities is netted out of General Fund service cost for purposes of the analysis by deducting the contract cost paid by the nine cities.

[3] Deduction of program revenue effectively nets out cost of service to special districts (non-GF).

[4] Program revenue column reflects additional amount to remove one-time expenses included in total budget for this service area.

[5] Deduction of program revenue effectively nets out cost of service to cities served on a contract basis.

Source: County of San Diego. Adopted Operational Plan / Fiscal Years 2009-10 & 2010-11 (includes data on actual revenues and expenses for 2008-09).

Appendix A - 3

SUMMARY OF ACTUAL PUBLIC WORKS REVENUES AND EXPENDITURES FOR 2008-09 [(1)]
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	ACTUAL PUBLIC WORKS REVENUE / EXPENSE 2008-09 [(1)]	
PUBLIC WORKS REVENUE		
Intergovernmental		
Highway Users Tax (gas tax)	$41,168,160	From State controller's office remittance. Assumed to grow based on population
Intergovernmental other than gas tax	$48,171,172	assumed to be independent of population growth
	$89,339,331	
Taxes		
Taxes Current Property	$5,762,199	assume either designated for specific improvements (transnet sales tax) or applicable to special districts and county service areas
Taxes Other Than Current Secured	$15,492,669	
Subtotal Taxes	$21,254,868	
Cost Recovery and Program Revenues		
Charges For Current Services	$62,393,554	assumed to relate to public works service activities that are either independent of new development or activities that are fully funded by cost recovery revenues.
Licenses, Permits & Franchises	$120,211	
Fines, Forfeitures & Penalties	$24,417	
Subtotal Cost Recovery & program revenue	$62,538,182	
Other Revenues		Independent of population growth
Revenue From Use of Money & Property	$19,384,778	
Other Financing Sources	$6,221,997	
Reserve/Designation Decreases	$1,793,382	
Use of Fund Balance	($5,952,970)	
General Revenue Allocation	$6,213,636	
Miscellaneous Revenues	$4,165,966	
Subtotal Other Revenues	$31,826,789	
Total Public Works Department Revenues	**$204,959,170**	

ACTUAL
PUBLIC WORKS
REVENUE / EXPENSE
2008-09 [1]

PUBLIC WORKS EXPENSES

Included Items		
Transportation Program	$33,944,697	
General Fund Activities Program	$11,016,510	
(Less) Adjustment for one time expenditures	($3,100,552)	Per County staff - relates to one-time expenses
Adjusted General Fund Activities	$7,915,958	
Management Services Program	$11,563,599	
	$53,424,254	Assumed to be generally proportional to roadway lane miles.
Excluded Items		County staff has indicated that these service areas are either generally independent of new development or fully funded by user charges and cost recovery revenues.
Permanent Road Divisions	$1,284,789	
Engineering Services	$70,220,938	
Land Development Program	$15,112,027	
RF Emergency Services	$17,041	
Solid Waste Management Program	$7,531,201	
Wastewater Management Program	$6,014,093	
Flood Control	$6,059,533	
Equipment ISF	$6,664,535	
County Service Areas	$282,891	
Street Lighting District	$1,628,893	
Sanitation Districts	$16,721,019	
Airports Program	$16,897,403	
	$148,434,363	
Total Public Works Expense - Adjusted	$201,858,617	
Add Back: Adjustment	$3,100,552	
Total Public Works Expense	**$204,959,169**	

Notes:

[1] Includes Public Works revenues and expenses for all County funds. Fiscal year 2008-09 is the most recent year information on actual revenues and expenses is available.

Source: County of San Diego. Adopted Operational Plan / Fiscal Years 2009-10 & 2010-11 (includes data on actual revenues and expenses for 2008-09).

SAN DIEGO RURAL FIRE PROTECTION DISTRICT 2008-09 BUDGET
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	BUDGET FOR FISCAL YEAR 2008-09 [1]	
SAN DIEGO RURAL FIRE PROTECTION DISTRICT		
Summary of Revenues		
Property Taxes	$497,350	
Special District reimbursements		
CFD Reimbursement	$20,000	
CFD 02-01	$36,459	
CFD 04-1	$100,142	
CFD 93-01	$124,266	
Descanso CSZ	$53,000	
Jamul CSZ	$238,000	
CSZ Admin Fee	$3,500	
	$575,367	
Mitigation Fund	$100,000	
EMS Cost Recovery	$5,000	
Funding from County of San Diego	$3,065,775	
Other Revenues	$884,428	
Total Revenue	**$4,630,570**	
Expenses		
Staff Costs	$207,636	
Buildings and Equipment	$416,421	
Services and Supplies	$152,925	
Cal Fire Contract	$3,827,212	
Total Expense	**$4,604,194**	
(Less) Mitigation Fund	($100,000)	for capital items
(Less) EMS Cost Recovery revenue	($5,000)	cost recovery revenue
(Less) Items Funded by Special Districts	($575,367)	for enhanced services to specific areas funded by districts.
Net Annual Operations Expense	**$3,923,827**	

Source: San Diego Rural Fire Protection District FY 2008-09 Budget.

Appendix A - 5

ALPINE FIRE PROTECTION DISTRICT BUDGET FOR FY 2008-09
FISCAL IMPACT ANALYSIS
GENERAL PLAN UPDATE: HYBRID SCENARIO
COUNTY OF SAN DIEGO **OCTOBER 7, 2010**

	BUDGET FOR FISCAL YEAR 2008-09 [1]	
ALPINE FIRE PROTECTION DISTRICT		
Summary of Revenues		
Property Tax	$2,835,932	incl. prop tax related interest
Benefit Fee	$414,894	
Interest	$65,325	
Other income	$181,424	
Mitigation fund transfers	$12,098	
Total Revenue	$3,509,673	excl. special revenue funds
Expenses		
Payroll	$1,550,732	
Employee Benefits	$794,997	
Unemployment	$400	
Clothing	$45,455	
Communication	$104,779	
PASIS	$34,626	
Household	$6,000	
FAIRA	$13,973	
Maintenance Equipment	$94,909	
Maintenance Radios	$1,750	
Maintenance Structures	$14,500	
Medical Supplies	$9,010	
Membership	$2,401	
Office Expense	$18,181	
Professional Fees	$26,230	
Publications	$99	
Training	$35,730	
Workshops	$17,086	
Utilities	$31,637	
Special District Expense	$75,745	
Directors Fees	$6,000	
Fire Prevention	$18,311	
Equipment	$40,516	
Total Operating Budget	$2,943,067	

	BUDGET FOR FISCAL YEAR 2008-09 [1]	
Debt Service Station 17	$308,236	
Capital Equipment	$30,800	
Contingency	$85,385	
Emergency Fund	$1,565	
Total Budget	**$3,369,053**	excl. special revenue funds
(Less) Capital Items	($339,036)	
(Less) Benefit Fee funded items	($414,894)	
Net Annual Operations Expense	**$2,615,123**	

Source: Alpine Fire Protection District FY 2008-09 Budget.